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'Carry Not a Picke-Tooth In Your Mouth': An Exploration of Oral Health in Early-Modern Writings

by

Laura Kennedy

A Doctoral Thesis

Submitted in partial fulfilment of the requirements for the award of Doctor of Philosophy of Loughborough University

27th February, 2012

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CERTIFICATE OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this thesis, that the original work is my own except as specified in acknowledgments or in footnotes, and that neither the thesis nor the original work contained therein has been submitted to this or any other institution for a degree

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This thesis is dedicated to my Auntie Julie who put her confidence in me when it was needed most.

Abstract

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This thesis is an exploration of various aspects of oral health in the early-modern period. It examines evidence taken from texts belonging to a range of genres including surgical manuals, botanical texts, midwifery manuals, poets and plays. Building on existing academic work relating to the history of dentistry and venereal disease, it aims to assimilate material from across science and the arts in order to gain a sense of what general social expectations were in relation to the condition of the teeth and palate, and how people suffering with a decline in oral health were advised, or what treatments were available to them either from a professional or in the home. It aims to challenge existing preconceptions that people living in this period displayed a negligent attitude towards the health of their teeth and oral hygiene.

The thesis contains four chapters which each focus on a different aspect of oral health, though many themes recur across all four chapters. The first chapter investigates advice that was available in print, and therefore likely to be in public consciousness, to the early-modern individual in relation to maintaining their teeth. It then considers the portrayal of unattractive teeth and bad breath in early-modern literature. Chapter Two deals with early-modern explanations of what caused the toothache and how it could be remedied. Analysis of the depictions of toothache in various poetry and plays follows in order to explore how wider society made sense of medical thinking at the time. The palate becomes the sole focus of Chapter Three, which considers what specific health concerns posed a threat to the condition of the roof of the mouth, and what difficulties could arise for the individual whose palate has been damaged by disease or injury. The thesis concludes with a chapter which investigates the history of a congenital oral birth defect, the cleft lip and palate. The thesis was designed to allow each chapter to deal with a separate facet of oral health; they encompass in turn: oral hygiene, dental pain, the impact of disease on the palate and an exploration of an oral birth defect.

An undercurrent of the thesis is to use a range of material to ascertain a realistic idea of what it was like for an individual to experience oral health difficulties in this period. It is therefore interested in how society perceived people who were experiencing problems with their oral health, and what could be done to improve their quality of life. The research presented here represents a contribution to the field of the history of oral health and aims to provoke further questions relating to the responsibility early-modern individuals took for their own oral health, and the specific situations in which intervention, either surgical or medicinal, was deemed necessary.

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<u>'Carry Not a Picke-Tooth In Your Mouth': An Exploration of Oral Health in Early-</u> <u>Modern Writings</u>

Thesis Introduction

Life in early-modern England was, without doubt, often unsanitary. Academics such as Mary J. Dobson and, more recently, Emily Cockayne have provided unflinching accounts of the dirt, odours and waste that the average individual might expect to have encountered on a daily basis.¹ Dobson, in describing the rising popularity of recommendations for personal hygiene in the sixteenth and seventeenth centuries, makes reference to English physician Andrew Boorde's advice printed in 1547 as he advises his reader to 'washe your handes and wristes, youre face and eyes, and youre teeth with colde water'.² As part of her examination of early-modern living conditions, Cockayne includes a section subtitled 'The tongue is ever turning to the aching Tooth' which details some of the remedies recommended for rotten or aching teeth. Cockayne also briefly makes reference to the role of barber surgeons in providing teeth cleaning services and the provision of prosthetic teeth. The evidence tends to be taken from the early eighteenth century, but Cockayne's work concisely underlines some of the work undertaken in the first two chapters of this thesis.³ Had this thesis been interested in the extremes of neglect, it would have been possible to accumulate and analyse numerous depictions of individuals who supposedly ignored their oral health and left their teeth to ruin, such as numerous accounts of Elizabeth I's troubling teeth and those of Samuel Pepys's wife, Elizabeth. However, the research presented in this thesis is primarily concerned with textual evidence which joins other academic work in complicating the assumption that those belonging to English early-modern society did not care about their own personal hygiene, particularly their oral health.

Most academic work that is primarily concerned with hygiene or dental health embrace the notion that those living in the seventeenth century were encouraged to maintain a basic level of personal hygiene, both in writing and by general social standards. The assumption that early moderns neglected their teeth arises from a generalisation made on the basis of the principles of hygienic practise being different to those expected today. One could note, for example, the highly-popularised notion of Elizabeth I's yearly bath, or a lack of effective sewerage systems in cities, as documented by Cockayne mentioned above. It is for

¹ Contours of Death and Disease in Early Modern England (Cambridge: Cambridge University Press, 1997) and Hubbub: Filth, Noise and Stench in England, 1600-1770 (London: Yale University Press, 2007), respectively.

² Contours of Death and Disease, p. 32.

³ Hubbub: Filth, Noise and Stench, p. 64-5.

this reason that it is impossible to attribute this assumption to a particular field of scholarship. The assumption is usually made in passing, where the focus is not on early modern texts specifically interested in oral health. For instance, historian Mary Lindemann asserts in her account of medicine and health between 1500 and 1800 that 'bad teeth' were 'a curse of the early modern world'.⁴ Lindemann makes reference to 'dentists' who travelled with their trade which mainly involved tooth-pulling, as well as retailing in tooth-powders, mouthwash and false teeth. Though Lindemann is not inaccurate in her portrayal of an element of dental treatment in this period, this passage leaves the reader with the clear idea that the teeth of early modern people inevitably rotted and then had to be removed by these roaming 'dentists'. In doing so, Lindemann underscores the popular assumption that poor dental health was inevitable in this period. That said, earlier in the same text, Lindemann does acknowledge that tooth decay in England during the early-modern period was not as prevalent as during the nineteenth century when sugary confectionery became more widely available.⁵ She also attributes part of the difficulty faced in oral health in this period is due to nutritional disorders, such as scurvy, causing unhealthy gums as is discussed further in chapter three.

Another example of a text which supports the notion of dental neglect in this period is in Michelle Sauer's *Companion to British Poetry Before 1600.*⁶ In a discussion of Shakespeare's Sonnet 130, Sauer mentions that, at the time of Shakespeare's writing, 'dental hygiene and dental care was not very advanced'; of course, this is true in comparison with modern day standards, but a state of being 'not very advanced' is altogether different to neglect. She advances with 'people brushed their teeth – if they even bothered to do so – with twigs whose ends were chewed [...] or they wiped them with a tooth cloth'.⁷ This demonstrates an awareness of hygienic practises undertaken by members of this society, but the way the practise is presented suggests a laissez-faire attitude that was not possibly undertaken universally. Emily Cockayne takes a more sensitive approach to the subject. In *Hubbub: Filth, Noise and Stench in England, 1600-1770*, she attributes the prevalence of tooth decay in the period to a number of sources, only one of which is poor dental hygiene.⁸ She asserts rightly that archaeological surveys suggest that the majority of adults living in the

⁴ Mary Lindemann, *Medicine and Society in Early Modern Europe* (Cambridge: Cambridge University Press, 2010), p. 262.

⁵ Lindemann, *Medicine and Society*, p. 37.

⁶ Michelle Sauer, *The Facts on File Companion to British Poetry Before 1600* (New York: Facts on File, 2008), p. 394.

⁷ Sauer, *Companion to British Poetry*, p. 394.

⁸ Hubbub: Filth Noise and Stench, p. 23.

period suffered some degree of tooth decay and lists some of the potential causes of this as: a taste for sugarplums, coffee and tobacco, use of emetics and malnutrition. The strength of this approach is that Cockayne is realistic about the impact of oral health provisions being 'not very advanced', but balances this fact with other factors that would certainly lead to individual dental problems. The issues described are prescribed more to a lack of knowledge and other situational factors than a sense of neglect.⁹

Chronologically, the focus of this thesis is the seventeenth century. When examining written materials from across a particular stretch of time, it is essential to take into account extraneous factors that could affect the body of evidence available. For example, the welldocumented publishing boom between 1640 and 1660 meant that the variety of printed material available increased exponentially.¹⁰ Further to this, in the field of medicine, Elizabeth Jane Furdell documents how, though competition for patients' trade was already strong by this point, it escalated after the 1660 with the crowning of Charles II. Within the realm of publishing, booksellers and printers took advantage of this boom and began to produce medical texts which were merely a variety of recipes, definitions and anatomical explanations gathered together, translated and printed for the layperson.¹¹ This helps explain why the volume of material available in terms of instructions for oral hygiene and remedies for oral disease grows exponentially from the middle to the second half of the seventeenthcentury. This may, of course, imply that the matter of oral health and maintaining one's own level of personal hygiene may have become more pertinent within society as such advice was contained in material commonly circulated amongst the marketplace. This does not imply, however, that during the first half of the seventeenth century that such awareness did not exist, merely because it was less visible in written form. It also stands to reason that, if written materials with such subject matter were being more widely circulated and understood by the layperson in society, that it would be more likely to appear in texts which are designed to entertain and amuse people across the social spectrum. It therefore makes sense that more literary sources would make reference to dental health as a widely-recognised concept.

The main reason that this study focuses upon the mouth is that the mouth provides an unusual physiological lynchpin in that it performs a number of essential functions for bodily survival but also, it is often the focus of literary attention. Beauty ideals surrounding the lips,

⁹ Cockayne, *Hubbub: Filth, Noise and Stench*, p. 23.

¹⁰ David Zaret, Origins of Democratic Culture: Printing, Petitions, and the Public Sphere in Early-Modern England (Princeton: Princeton University Press, 2000), p. 175.

¹¹ Elizabeth Jane Furdell, *Publishing and Medicine in Early Modern England* (New York: University of Rochester Press, 2002), p. 29.

teeth and sweetness of breath are used as a standard literary convention of love poetry across the period and beyond. The very visible and audible nature of the functionality of the mouth also means that writers could use the mouth and its parts either to represent concepts metaphorically in their work or in a literal way. For instance, oral malfunctions or unpleasant appearance are used as tropes to lend a character a comic or tragic aspect. Within the humoral system, the mouth was also the site where humours from the brain and the stomach could be purged. In his popular medical compendium, *Mikrokosmographia*, Helkiah Crooke describes how the 'secundary or lesse principall use of the mouth is, that thorough [through] it by hauking we might avoide the excrements of the head, by Coughing the excrements of the Chest and Longues, and sometimes also by Vomiting those of the Stomacke'.¹² Physician Philip Barrough also describes how one of the causes of toothache is 'flowing of humours of the head unto the rootes of the teeth, which with ther sharpnes either doe gnaw about them, or els with their aboundance, they engender like greife in the teeth'.¹³ This means that poor oral health could often be read as a sign of bodily dysfunction.

In contrast to the early-modern era, nowadays individuals of all ages are targeted by advertising for various toothpastes, electric toothbrushes, tooth floss, and mouthwashes for cleaning and preserving the health of one's teeth and it is an age where provisions for restorative dentistry are fairly accessible and well-developed. In a society where the provision of false teeth were, as described, potentially worse than being toothless, it is logical that early-modern people were also targeted by those selling mouthwashes and tooth-cleaning services.¹⁴ Charles Allen, author of *Operator for the Teeth* (1686), emphasises the importance that false teeth are 'well made, and according to the best Art' because otherwise they may cause more problems than they resolve.¹⁵ Advertisements, therefore, were designed to take advantage of a general fear that once the health of the teeth began to decline, discomfort was in store. For instance, the advertises goods 'sold at the Author's House at reasonable rates', includes 'a Pouder that cure the Tooth-ach immediately' and 'a Pouder to whiten and fasten Teeth, and to cleanse the Mouth of scurvy Humours'.¹⁶ Also, the dental treatments included in Richard Amyas's text, *An Antidote Against Melancholy*, are discussed in the first

¹² Helkiah Crooke, *Mikrokosmographia: A Description of the Body of Man* (London: William Jaggard, 1615), p. 621. 'hawk, *v.3*' OED entry 1: To make an effort to clear the throat of phlegm; to clear the throat noisily.

¹³ Philip Barrough, *The Methode of Physicke* (London: Thomas Vautroullier, 1583), p. 54.

¹⁴ John Woodforde, *The Strange Story of False Teeth* (Bury St. Edmunds: St. Edmundsbury Press, 1983), pp. 22-3.

¹⁵ Charles Allen, *The Operator for the Teeth* (Dublin: Andrew Crook, 1686), p. 19.

¹⁶ William Atkins, A Discourse Shewing the Nature of the Gout (London: Thomas Fabian, 1694), p. 128.

chapter of this thesis, but at the end of this text, Amyas also details the services he himself can provide with confidence. He states that:

I take forth hollow teeth or roots, though never so short, with wonderful dexterity and ease. I make smooth and even teeth that are uneven. I put in artificial teeth in the fore part of the mouth. Hollow teeth that you would not have drawn, I can stop them. I can fasten loose teeth.¹⁷

Amyas claims to be able to solve a number of dental issues including fillings, extractions and replacement teeth. His success rate is, of course, unknown but his self-assurance seems likely to attract the attention of anyone suffering, or afraid of extraction.

This thesis explores a wealth of primary materials, such as printed medical textbooks, poetry collections, plays, and domestic guidance books, in the pursuit of establishing exactly what comprised cultural expectations surrounding the health of the mouth in early-modern England. This research is necessary because to move towards a semblance of how life was really experienced in this period, it is essential to consider literature from across the spectrum. One text is not evidence enough in itself to challenge existing generalisation about the state of oral health in this era, but the analysis of a collection of references which point towards a contrary point of view, can invite the question of whether oral health was considered an important part of the daily routine to be reconsidered. In the course of the research into cultural norms of the presentation of a healthy mouth, the thesis deals mainly with the condition of the teeth and the palate. The thesis then moves on to a specific case study which explores in detail the history of a congenital oral birth defect: the cleft lip and palate. In considering oral health, the first natural starting point is the teeth. As I will demonstrate in Chapter One, though some existing academic work on the history of dentistry acknowledges that the average early-modern individual may have taken better care of their teeth than is commonly believed, the prevailing presumption is that people in this period did not appreciate the importance of keeping their teeth clean. A popular justification for this negligence of personal hygiene is that because everybody suffered similarly with rotten teeth and bad breath, it was accepted as a cultural norm. The intention of this research was never to reject this assumption entirely, indeed, archaeological evidence does suggest that people in this period did commonly suffer with serious dental decay.¹⁸ But it is important to question the extent to which, in an age without detailed understanding of microbiology and chemical

¹⁷ Richard Amyas, An Antidote Against Melancholy (London: Richard Amyas, 1659), p. 7.

¹⁸ Emily Cockayne, *Hubbub: Filth, Noise and Stench in England, 1600-1770* (London: Yale University Press, 2007), p. 23.

sterilisers, this decay was inevitable, and was not necessarily a direct result of a society-wide negligent attitude towards cleanliness and the mouth, or a result of ignorance of the correlation between uncleanliness and ailing health as suggested by R.O. Bucholz.¹⁹

If it were a universal inconvenience that adults living in this age had teeth which rotted and became prematurely loosened, this might suggest that those poets and playwrights who mock such afflictions were playing on a shared knowledge that such dental problems were inevitable. This thesis argues that the nature of references to rotten or unkempt teeth, and indeed the unhealthy palate, points specifically to the fact that they were associated with a certain unsavoury personality type, especially in connection with the female sex; this is particularly prevalent in the epigrammatic verse of the mid-to-late seventeenth century. This, I will argue, happened because unsightly teeth provide a quick way of representing ugliness, especially in women due to the pervasive beauty ideal of women having small, white and even teeth.

In researching medical and literary accounts of the health, or ill-health, of the roof of the mouth it soon became apparent that this often-overlooked but vital membrane was particularly vulnerable to disease in this period. This means that the research presented here adds a new level of clarity to the way that people have assumed that early-modern people related to their mouths. Conditions such as syphilis, scurvy, and the bubonic plague inflamed and often ate away the flesh of the palate leaving the sufferer with faltering speech, a lifelong testament to the disease they endured. There are scant cases documented where the palate was able to heal itself following such damage caused by disease. Minister John Evans, for example, documents the case of a young woman who 'without any deservings of her own' contracted syphilis and this caused 'a cruell sore canker in her mouth that had eaten away the *uvula* and corroded a great hole in the palate'.²⁰ Evans relates that 'her speech was so impaired, that it was nigh well lost' (fol. 3^r). Through a process of purging and cleansing the mouth, and administration of the same liquid used the clean the mouth as an oral medicine, 'the Disease was overcome, the malignant humor was purged, the blood and Liver purified and cleansed, the canker in the mouth was healthed' and 'a new flesh grew and cover all over the palate, her speech became perfect, and she was thoroughly cured' (fol. 3^r). This was by no means typical, and most medical texts that deal with this condition seek a more proactive cure.

 ¹⁹ R. O. Bucholz, *Early Modern England 1485-1714: A Narrative History* (Chichester: Wiley-Blackwell, 2009), p. 178.
 ²⁰ John Evans, *The Universall Medicine, Or, The Virtues of the Magneticall, Or Antimoniall Cup* (London:

²⁰ John Evans, *The Universall Medicine, Or, The Virtues of the Magneticall, Or Antimoniall Cup* (London: Richard Hodgkinsonne, 1651), fol. 3.

Another condition which also greatly concerned medical writers was described as the falling of the palate or uvula, which in modern terms is likely to be considered akin to a swelling in the soft palate or uvula. As will be explored at length in Chapter Three, this was usually attributed to disease or infection but its cure was viewed as important to the patient's survival and its treatment was often extreme. For patients suffering from problems with their soft palate, various avenues of therapy were available, such as fashioning a plate which could fit into a gap in the soft palate to allow the patient to talk and swallow without losing air, or food, up through the nasal passage. As mentioned briefly above, those who had suffered palatal damage were often regarded, at least in a literary sense, as unsavoury or lascivious due to the association with venereal disease. The extent to which this association affected the lives of sufferers is difficult to ascertain but it was certainly highlighted by various early-modern writers, especially for comedic effect.

In the contemporary academic context of this thesis, studies of corporeality and the history of the body are particularly commonplace. Naturally, Roy Porter's vibrant influence in the nurturing of this field cannot be underestimated. As the study of the history of the body lends itself to a multidisciplinary approach, so most of its contributors come from a range of academic fields such as Katharine Park (History of Science), Patricia Crawford (History), Elaine Scarry (English and American Literature) and Gail Kern Paster (English Literature). Existing academic work on the history of the body suggests that people living in this period did take steps to preserve their health, and not just when things appeared to be going awry. Scarry's seminal text, The Body In Pain is useful to this thesis in a number of ways.²¹ Firstly. it provides a useful model of a multidisciplinary perspective to bodily matters and encourages other scholars to embrace this perspective. Secondly, it underlines the nature of pain as inescapable to the individual experiencing it; chapter two of this thesis explores the presentation of toothache in early modern printed works, both medical and literary, and often toothache is described as the worst possible kind of pain. The usefulness of Scarry's work is limited within the realm of this research, for two reasons: it does not lend focus to different locus where pain is experienced and it refuses to acknowledge any difference in the way pain is experienced in relation to historical context. It is also problematic that much of Scarry's thinking is based on the assumption that the presence of severe pain results in the loss of language, whereas much of the literature in chapter two is poetry, a heightened form of language, which has supposedly resulted from an individual in severe pain. In contrast, Gail

²¹ Elaine Scarry, *The Body In Pain: The Making and Unmaking of the World* (Oxford: Oxford University Press, 1985)

Kern Paster's work, Humoring the Body: Emotions and the Shakespearean Stage fulfils what is lacking in Scarry's work in that her text is focussed on an historic period and therefore takes a firm position in terms of the importance of historical context.²² Where Paster's work is restricted is in terms of its subject matter as indicated by the title; Paster's focus is the body as portrayed on the Shakespearean stage and therefore it lacks the dimension that a partial focus on works from other genres, or even other writers, would give.²³ The collection of essays edited by David Hillman and Carla Mazzio entitled The Body in Parts; Fantasies of Early Modern Corporeality in Early Modern Europe provides an invaluable source of scholarship on the history of the body. Mazzio's chapter on the tongue, 'Sins of the Tongue' delivers early modern responses to the tongue from a variety of texts; however, Mazzio tends to focus on what the tongue represents rather than its physical reality.²⁴ The chapter looks at the tongue as representative of the voice and then proceeds to consider violence against the tongue. This research is inclined towards the practical experience of corporeality and as such is wary of placing too much theoretical significance on the role of the teeth and the mouth beyond their physical role and the effects they have on an individual's living experience. The extensive range of scholarship produced on the history of the body, particularly in relation to literature, rightly suggests that it is a field of study that has been popular for a number of years. There are not many research projects which focus solely on one part of the body. The aim of the thesis is to add to the burgeoning corpus of work relating to oral hygiene in this period and to embrace the progressing change in thinking that recognises that those living in sixteenth and seventeenth-century England were being advised to maintain their oral health and also that they themselves made the connection between keeping their mouth clean and the likelihood of retaining their teeth to an older age. By targeting cleanliness, dental pain, the impact of disease and lastly a congenital defect, the thesis aims to draw attention to the various facets of oral health which make the condition of the mouth in an early-modern cultural setting worthy of attention, evidenced by the wealth of material available in earlymodern print.

²³ Gail Paster, *Humoring The Body: Emotions and the Shakespearean Stage* (Chicago: University of Chicago Press, 2004).

²⁴ David Hillman, Carla Mazzio (eds.), *The Body in Parts: Fantasies of Corporeality in Early Modern Europe* (London: Routledge, 1997), pp. 53-79.

Structure

The thesis is divided into four chapters based on different aspects of the physiology of the mouth. Each chapter also embodies a different aspect of oral health and treatment. The first chapter is concerned with oral hygiene and the ways in which the individual could care for and preserve their teeth. It also explores the way in which those with apparently unhealthy teeth were portrayed in literature. In line with the conventions of comedic literature the physicality of the teeth are almost cartoon-like in their exaggerated ugliness. Fairly typical is poet John Collop's description of the female character Pentepicta which focuses on her 'enamell'd Teeth, black, white and yellow'.²⁵ He describes how with her teeth being 'checker'd black and white', it means that 'Her mouth ope, you at Chesse may play' (p. 75). Chapter Two also focuses on the teeth but in relation to dental pain and what treatments were available to the toothache sufferer. Toothache was often portrayed as the worst non-fatal pain that could be suffered and was therefore used by writers in various mediums to represent anguish and torment. This chapter encompasses an analysis of oral surgery as it considers the role of the barber-surgeons in dental treatment and tooth-drawing. It also considers services and remedies available for the whitening of the teeth and furthermore indicates that these were as common as those prescribed for dental pain, reinforcing the notion that early-modern society did uphold beauty ideals in relation to the appearance of their teeth. Chapter Three moves the thesis from the teeth to focussing on the roof of the mouth. Similarly to Chapter Two, this chapter deals with oral health concerns which need medical attention but do not present a visibly aesthetic problem. The complications presented by the health problems in this chapter predominantly cause difficulties with speech and discomfort. Irritations and damage to the palate are largely caused by infectious disease or malnourishment. The final chapter acts as a case study which focuses on the written representation of a congenital oral defect: the cleft lip and palate. It surveys the various treatments that were available to those born with a cleft-affected mouth and challenges existing preconceptions that the cleft palate would not be operated on due to its misconceived association with venereal disease. This is complicated further by discoveries revealed in Chapter Three relating to the treatment of the fallen palate or uvula.

²⁵ John Collop, *Poesis Rediviva, Or, Poesie Reviv'd* (London: Humphrey Moseley, 1656), p. 75.

Sources

Most sources that pre-date the turn of the eighteenth-century were accessed via the database, Early English Books Online. Those from the eighteenth-century were studied via Eighteenth Century Collections Online. In researching this project, there was a conscious effort to draw together a variety of references across different genres and therefore there are many brief references to numerous texts. This is to facilitate a sense that relevant material has been accumulated with a view to gaining a landscape of evidence which then allows the greatest chance of seeing how oral health was being discussed and experienced in a cultural sense. Reading medical texts as literary sources helps move towards a sense of how certain oral health difficulties were perceived in society at large. This evidence can then be compared to texts from more conventional literary sources, such as poetry or plays, to see if the expectations and assumptions made are carried across to texts written for more entertaining purposes. In The Lancet, Faith McLellan has speculated about the relationship between literature and medicine and describes how from the 1960s, US medical students were increasingly required to study literature as part of their medical training as a way of increasing their empathic tendencies but also encouraging the reflective side of their professional conduct.²⁶ McLellan also points out the relationship between the study of literature and how this might help medical students with learning to deal with ethical quandaries in medical science. The idea of studying literature in medicine is not to learn about the narrative content of the literary texts, but to develop the critical and analytical skills of medical students and help them to become attuned to 'the richness of context and the nuances of everyday clinical, personal, and professional encounters'.²⁷ The benefits of students and academics trained in reading literary texts turning their attention to medical texts works in a similar way. Early-modern medical texts can be plundered for historic medical facts in the same way parish records can give direct information about when and where things happened; to limit the purpose of reading to establishing merely facts of medical knowledge in this period is to severely underestimate the complexity of what the text has to offer. Though, superficially, there is a great deal of knowledge to be gained from reading the text as

²⁶ Faith McLellan, 'Why Literature and Medicine?', *The Lancet*, 9020 (1996), 109-111.

²⁷ 'Why Literature and Medicine', p. 110.

it was intended, as an instructional or informational guide, if the reader also considers the language the reader has chosen to use to describe certain conditions, or why and how the writer has chosen to deliver the information with a particular tone, the reader can move towards a fuller understanding of the cultural context of the medical text at hand. It is not simply a case of being aware of cultural context, as of course Historians would be, but reading with a greater focus on authorial intent and, conversely, how an early-modern reader might interpret the text; this encourages the reader to engage with the material as evidence of social context in itself, as opposed to merely being a gateway to the information presented inside.

The juxtaposition of medical and literary texts seems to afford a greater opportunity to piece together the cultural landscape of oral health than looking at either field in isolation. Medical texts can betray social attitudes towards certain conditions through subtleties of language choice as demonstrated in chapter four in discussion of the portrayal of children with birth defects; by the same token, though literary texts are not often written to teach in a direct, instructional way like a medical text often is, it is possible to infer from a collection of literary references to a particular phenomenon that there are certain cultural assumptions in operation; humour and understanding in a public domain often relies on shared cultural knowledge and it is evidence of this that helps modern readers ascertain what communal expectations are at work. This can be gained by collating references across a variety of texts, belonging to different genres, and written for different purposes. With its focus on oral health, this thesis aims to juxtapose a variety of sources which mention dental condition, oral deterioration, or congenital disorders affecting the mouth, in order to gain a greater sense of what cultural expectations were present in relation to this issue during the early-modern period.

<u>Chapter One</u> <u>'Rub the Teeth Morning and Evening': Improving Oral Health</u>

In line with the rest of the thesis, this chapter seeks to assimilate cultural ideas about what was considered healthy as gleaned from texts authored by writers of a medical background, and analyse how this transposes across to literary texts. Although there is an increasing amount of academic work which considers the various remedies and advice offered for keeping the teeth clean, there remains a popular assumption that people in early-modern England were not overly concerned about their oral health. This is not to suggest that every adult in society went to lengths to protect and preserve their teeth. Indeed archaeological evidence suggests that most early-modern adults in England suffered tooth decay.¹ However, the wealth of literature written about care of the teeth and the way in which decayed teeth are often the focus of scrutiny in literary works suggests that poor dental condition was not necessarily a result of a general unawareness of the benefits of keeping the teeth and the mouth clean. Initially, this chapter will explore the various advice offered for those suffering with halitosis, or malodorous breath. Bad breath was believed to originate either from the mouth, the lungs or the stomach. Consequently, the presence of an unsavoury smell on the breath could often indicate more seriously disordered health, such as ulcerated lungs. The chapter will also gather remedies offered by early-modern writers from a variety of professions for the preservation and whitening of the teeth. It is well-accepted that a degree of deterioration is inevitable with the teeth in the natural process of aging, and this generation is likely to have been accelerated by living in a period without reliable antibacterial mouthwashes such as those readily available today in the form of mouthwash and toothpaste. White teeth were seen as healthy, strong and a beauty ideal by literary and medical writers alike. This implies that, though perhaps rare, it was possible to maintain clean, white teeth with the limited materials available.

This chapter also explores the presentation of characters with discoloured teeth or bad breath in literature, both in poetry and drama. Fictional depictions of those with visibly poor oral health give clues as to what cultural perceptions were of bad teeth. The evidence presented here suggests that heavily discoloured teeth were not an accepted norm, but an unfortunate consequence of aging and/or poor dental hygiene. The presence of high-profile figures with unattractive teeth has helped perpetuate the idea that even those with wealth and

¹ Emily Cockayne, *Hubbub: Filth, Noise and Stench in England, 1600-1770* (London: Yale University Press, 2007), p. 23.

status did not bother to take care of their teeth. The idea that Elizabeth I sported black teeth from an early age is popular, but the account of meeting Queen Elizabeth given by André Hurault, Sieur de Maisse, 'Ambassador Extraordinary from Henry IV', suggests that this may have been exaggerated.² This account gives a frank description of the physicality of Elizabeth I. He notes that 'her teeth are very yellow and unequal, compared with what they were formerly' (p. 146). It must be remembered that, at this meeting, Elizabeth was sixty-eight years of age. He adds that 'many of them [her teeth] are missing so that one cannot understand her easily when she speaks quickly' (p. 146). The missing teeth may account for why, from a distance, it was well-reported that her teeth were black. Rather than reinforcing the idea that people in early-modern society did not care about their oral health, this evidence suggests that even those with the privilege of good advice and money enough to purchase what was needed for cleaning the teeth, the natural aging process could not be abated.

Keeping the Teeth Clean

Just as the practice of using a mouthwash to cleanse the breath was in evidence in the earlymodern period, centuries before the OED gives the first use of the modern term, so too were methods for the polishing and cleaning of teeth also described. Charles Allen, writer of The Operator for the Teeth discussed in Chapter Two of this thesis, shares his position on the care of healthy teeth in section two which describes 'the Alteration of the Teeth, with their *Remedies*³, First, he talks about the nature of dental plaque which he depicts as 'a certain petrifick juice distilling into the mouth, out of the Salival Ducts' (p. 12). He describes the plaque as a 'stone-like substance, commonly called the scales or scurf of the *Teeth*' (p. 12) which increases in thickness if it is not cleaned away. Allen highlights the dangers of not cleaning one's teeth as he notes that this plaque causes the teeth to 'stagnate' and 'there corrupting, do corrode it by degrees; beginning first by the alteration of its colour from white to yellow, and from yellow to black; and then fellows the real decay of its substance' (pp. 12-3). That people would visit others for hygiene purposes is discussed by Allen, who is keen to point out to his readers that if they are to have their teeth cleaned by someone else they must choose someone they know to be skilled in tooth-cleaning lest they make the problem worse than it already is by 'breaking of the *Film* that unites the Gums to the Teeth' or 'the taking

² Steven Mullaney, 'Mourning and Misogyny: Hamlet, The Revenger's Tragedy, and the Final Progress of Elizabeth I, 1600-1607', *Shakespeare Quarterly*, 45 (1994), 139-162 (139) ³ Charles Allen, *The Operator for the Teeth* (London: 1686), p. 11.

away of the gloss of the Teeth' (p. 14). This suggests therefore that tooth-cleaning services were fairly common and accessible. It is likely that these were provided by barber surgeons and/or local mountebanks. Once the teeth are clean, and not before, Allen advises that it is then appropriate to use a dentifrice to 'preserve' them (p. 14). The recipe he suggests consists of 'Magistery of Pearls, Powder of Coral and Dragon's-Blood mixed with Red-Rose-water'.⁴ Allen recommends that the reader use this dentifrice 'only once a week' and this 'will keep the *Teeth* clean and white; and by the constant use of it, fetch up their colour if lost' (p. 14). This advice was also given nine years earlier in a text falsely attributed to Hannah Woolley entitled The Compleat Servant-Maid; or, The Young Maidens Tutor (1677), where the writer advises that to 'Prevent the Tooth-ach' you should 'Wash your mouth once a week in White wine, in which Spurge hath been boyled, and you shall never be troubled with the tooth-ach⁵. In The Haven of Health (1636), physician Thomas Cogan also gave directions for producing a 'lotion' comprised of vinegar and rosewater which he says will 'cleanse the mouth and gummes from filth which corrupts the breath'.⁶ He makes no mention of how regularly this mouthwash should be used, but also does not set an advised limit. In another text falsely attributed to Hannah Woolley, The Accomplish'd Lady's Delight (1675), the writer advocates daily cleaning of the mouth stating 'it is good to cleanse the Mouth every Morning by rubbing the Teeth with a Sage-leaf, Citron-peels, or with powder made with Cloves and Nutmegs'.⁷ This advice shows that, for some people, at least, a daily tooth cleaning routine seems to have been carried out.

Tooth-rubbing was a popular way of keeping the mouth clean and preserving the teeth; a number of different substances to clean the teeth by this method were recommended and sold. Quite often publishers would take the opportunity to advertise their wares at the end of a text entirely unrelated to the field of medicine. At the end of a seventeenth-century translation of *Female Pre-Eminence, or, The Dignity and Excellence of that Sex above the Male* (1670) by Heinrich Cornelius Agrippa von Nettesheim, the bookseller Henry Million seizes the chance to advertise his forthcoming titles, in common with popular publishing practice. The final part of the advertisement begins by drawing the reader's attention to his medicinal products including a 'Water' which 'cures the Gout in old or young' and an 'Anti-

⁴ 'dragon's blood' OED entry 1: the inspissated juice of the dragon-tree and to exudations from *Pterocarpus Draco, Croton Draco,* and other plants.

⁵ Hannah Woolley, *The Compleat Servant-Maid; or, The Young Maidens Tutor* (London: 1677), pp. 48-9.

⁶ Thomas Cogan, The Haven of Health Chiefly Gathered for the Comfort of Students (London: 1636), p. 189.

⁷ Hannah Woolley, *The Accomplish'd Lady's Delight* (London: 1675), p. 191.

scorbattical water' designed to relieve sores on the skin caused by scurvy.⁸ The final cure targets those who have oral symptoms of scurvy which include bad breath and loosening of the teeth.⁹ Aside from curing 'Scurvey in the Mouth', the advertisement also claims that the water offers more general benefits: 'This excellent water [...] fastens the Teeth; killeth the Worms in the Teeth' and 'maketh the Teeth white' (p. 87). The directions for using the water are to 'take a small quantity in a Galley-Pot, and with a linen Rag dipped therein, gently rub the Teeth Morning and Evening' (p. 87). While the primary purpose of this cleansing ritual appears to be to relieve symptoms of a disease, the added benefits included imply that the water would be sold for the general improvement of the appearance and health of the teeth in a healthy individual.

Not all treatments offered were cures: some are preventative measures to preserve the teeth. The title of Richard Amyas's text suggests that it is concerned with melancholy as it is named An Antidote Against Melancholy, Or, A Treasury of 53. Rare Secrets & Arts Discovered (1659). The antidote to melancholy is entirely contained within the first brief 'secret' and the rest of the text supplies a curious collection of advice including 'how to make green ink', how to catch various birds 'alive with your hands' and how to make a lady's face 'fair smooth, and youthfull'.¹⁰ The front page of the book includes an image of a gentleman on a horse administering dental treatment to a man on foot with a speech bubble emanating from the former which says "Tooth or Stump without pain". This indicates that the man on foot has a dental complaint which is beyond treatment and he therefore has to decide whether to keep the tooth and suffer, or have the tooth extracted to eradicate the pain. This picture is a clever selling device as the text inside includes, not only two remedies for the toothache, but also information about 'a most rare Powder to keep the teeth from perishing, to fasten loose teeth, to restore the Gums wasted, to keep teeth white, or to prevent toothach, and make sweet breath' (The Table). The author personally endorses this product by claiming that the powder is 'the same I [Richard Amyas] sell and use'. The illustration on the front, therefore, clearly aims to play on the fears of the consumer and entice them to buy the book and/or the water. The idea is that Amyas presents a worst case scenario of what can happen if you do not look after your teeth, and then provides a solution which comes at a cost. Inside the book, secret number 2 is the dentifrice powder used to preserve the teeth. The recipe is complex enough to

⁸ Heinrich Cornelius Agrippa von Nettesheim, *Female Pre-Eminence, or, The Dignity and Excellency of that Sex Above the Male* (London: 1670), p. 87.

 ⁹ William McBride, "Normal" Medicine Science and British Treatment of the Sea Scurvy 1735-75', *Journal of the History of Medicine and Allied Sciences* 46 (1991), 164.

¹⁰ Richard Amyas, An Antidote Against Melancholy (London: Richard Amyas, 1659), The Table.

ensure that the lay-person reading the text is unlikely to attempt to make the concoction himself:

Take Pomistone [pumice stone] 1. Ounce, red Coral half an ounce, Mastich a quarter of an ounce, Cortix Granitorum a quarter of an ounce, Harts-horn burnt half an ounce, Pearls a quarter of an ounce, Cynamon half an ounce, 6. Cloves, Cuttle-bone half an ounce, Benjamin a quarter of an ounce, Crystal a dram, Myrrhe a dram, Ambergreece, grains; make this into a fine powder, and keep it close stopt in a box. (p. 1)

He advises that to use the powder, soak a cloth in white wine, vinegar or rosewater, dip this into the powder and 'rub the teeth morning and evening', and further to this 'after meat wash your mouth with white Wine, or Rose-water' (p. 1). This, he says, 'preserves the teeth from perishing, causeth a sweet breath, hardens the Gums, fastneth the teeth, and keeps them always white and sound' (p. 1). A text heralding the useful properties of 'spirits of salt' also recognises the importance of keeping the teeth clean in order to keep them healthy.¹¹ Sir Richard Barker directs the reader to 'Put 6 Drops [of spirit of salt] in 'a spoonful of running Water (or for the Curious [ingenious] into Rose-water) and with a small Linnen-Ragg, rub the Teeth'.¹² Barker fails to comment on how regularly the reader should use this method to clean their teeth but he does say that it 'cleanseth them from their Corrosive Gravel' which implies that it should be done whenever there is a build-up of plaque on the teeth (p. 2). By using this method, Barker claims 'its impossible they [the teeth] should corrupt, or putrifie' (p. 2).

Preventative advice on care of the teeth is certainly more frequent in the latter half of the seventeenth century, but this could be due to a number of factors. The volume of texts published grew so naturally where there is more written material, there is often more evidence to be found. It is important not to make assumptions about the practices of the public at large based on the absence of written evidence; a lack of instruction could merely be due to an assumed universal knowledge that it was important to keep teeth clean and free from 'scurf'. The notion of keeping the teeth clean certainly predates the early-modern period. Ancient Greeks and Romans used devices such as toothpicks to keep their teeth clean and the first toothbrushes with bristles date back to the fifteenth-century China; however they

¹¹ 'hydrochloric' OED entry 1: Containing hydrogen and chlorine in chemical combination. Hydrochloric acid (Earlier names were *muriatic acid, spirit of salt, chlorhydric acid.*)

¹² Sir Richard Barker, *The Great Preservative of Mankind, Or, The Transcendent Verture of the True Spirit of Salt* (London: 1662), p. 2.

did not reach Europe until the eighteenth century.¹³ There are examples of sixteenth-century texts which provide pre-emptive advice for preserving the teeth, though they are fairly scant. Lexicographer Peter Levens, who it is also thought practised medicine, produced a book entitled A Right Profitable Booke for All Diseases called, The Pathway to Health (1596).¹⁴ As well as providing a way to improve teeth that are discoloured, Levens also gives a recipe for a mixture 'To make the teeth cleane'.¹⁵ The mixture consists of rosemary, sage, alum and honey boiled together and strained. Levens recommends that the reader 'use it somtime to wash your mouth and the teeth therwith, and it will make them clean'.¹⁶ Also, he advises the reader to wash their teeth with 'the decoction of our Lady thistle root' which he claims will ensure 'thy teeth shall be fastened, and also kept cleane, and thy gums being sore about the teeth shalbe made whole' (p. 18).¹⁷

Thomas Lupton also includes a suggested method of keeping the teeth clean in A Thousand Notable Things, of Sundry Sortes (1579) as number nineteen in his list of notable things puts forward the idea that if a person hold salt under their tongue until it has dissolved into their saliva and then rub their teeth with the solution, 'it wyll preserve the teeth safe and sounde: and it wyll keepe them from rotting, and that they shall not be worm-eaten: a thing often proved true'.¹⁸ That said, number one on his list is the strange tale of a man, strolling around a garden with his lover, who took a leaf of sage from a nearby plant and rubbed his teeth with it (a commonly suggested method) before he 'immediatly fell down and dyed' (p. 1). His bewildered lover told 'the Judge' that 'she knew nothing that he ayled, but that he rubbed his teeth with Sage' (p. 1). His lover then goes with the Judge to the garden where the man died, and the woman shows the judge how he took the sage leaf and rubbed it on his teeth, but 'presently she dyed also, to the great marvayle of all them that stoode by' (p. 1). The Judge orders the sage plant to be dug up from the ground and burned. However, under the plant, 'there was a great Tode founde, which had infected the same Sage with his venomous breath' (p. 1). Lupton attributes this tale, as he does many of his anecdotes, to Antoine Mizauld, and he takes the moral of the story to be 'a warning to such as rashly eate rawe & unwasht Sage' (p. 1). Lupton recommends caution when plucking raw sage from an unknown plant, but does not feel the need to explain why the man in the tale would use sage to clean his teeth, suggesting that this was a well-recognised practice. It is also an example of

¹³ Fermin Carranza, *The History of Periodontology* (Chicago: 2003), p. 147.

¹⁴ 'Peter Levens (fl. 1552-1587), Oxford Dictionary of National Biography

¹⁵ Peter Levens, A Right Profitable Booke for All Diseases called, The Pathway to Heath (London: 1596), p. 18. ¹⁶ Levens, *The Pathway to Health*, p. 18.

¹⁷ 'Our Lady's Thistle' OED entry Compounds: the milk thistle, *Silybum marianum*.

¹⁸ Thomas Lupton, A Thousand Notable Things of Sundry Sortes (London: 1579), p. 6.

the way that early-modern medicine presumed an affinity between similar situations, therefore a toad with 'venomous breath' would cause poisons in the mouth of a person using a leaf of a plant it had contaminated to attempt to freshen his mouth.

Published at the turn of the seventeenth century, William Vaughan's popular text Naturall and Artificial Directions for Health (1600) concludes with a section about how to maintain one's own health to avoid having to pay medical costs or seek external help.¹⁹ He advises that it is prudent to 'picke and rub your teeth' to save yourself the price of 'making dentifrices'.²⁰ Vaughan offers four rules for maintaining the teeth and 'to have a sweete breath' (p. 70). The first rule is to wash the mouth thoroughly after eating meat. Secondly, you must 'sleepe with your mouth somewhat open', presumably to avoid the mouth growing stagnant and putrefying, or to allow for the egress of some of malodorous humours to prevent them causing halitosis. The third rule is to ensure that on waking you spit out 'that which is gathered together that night in the throate' (p. 71). The final part of the cleaning routine is similar to others just listed. Vaughan directs the reader to 'take a linen cloth and rub your teeth well within & without, to take away the fumositie of the meat and yellownesse of the teeth' (p. 71). As noted by Philip Withington, Vaughan's text was reproduced in six editions over a thirty year time span indicating that it was a well-used and trusted resource.²¹ The nature of Vaughan's instructions suggests that the necessity to clean the teeth was already in public consciousness but that people were seeking advice as to the best method. Plus, it would be a good selling point for the book itself to contain the latest, or most detailed, guide for how to clean and preserve one's teeth.

Toothpicks

It has been observed that the toothpick has moved in and out of fashion for thousands of years.²² Henry Petroski, author of *The Toothpick: Technology and Culture* which explores the history of the implement, claims that, during the Renaissance, the toothpick was worn conspicuously or displayed as part of an open toilet set in portraits. While the toothpick served as a fashion accessory, supposedly denoting a person of refinement, it was often recommended as a necessary item for people across the spectrum of society to keep their teeth free from debris caught between the teeth which could rot and damage the teeth. In

¹⁹ Philip Withington, *Society in Early Modern England* (Cambridge: Polity Press, 2010), p. 87.

²⁰ William Vaughan, Naturall and Artificial Directions for Health (London: 1600), p. 70.

²¹ Withington, *Society in Early Modern England*, p. 87.

²² Henry Petroski, *The Toothpick: Technology and Culture* (New York: 2007), pp. 15-6.

1695, John Pechey recommends in The Store-House of Physical Practice (1695) that the teeth 'must be daily cleansed from Filth, and Meat that sticks in them, by a Tooth-picker'.²³ Dutch anatomist, Isbrand van Diemerbröeck, also champions the use of the toothpick in William Salmon's translation of his Latin text, The Anatomy of Human Bodies, published in 1694. He describes how a patient of his 'had a very Stinking Breath'.²⁴ Diemerbröeck advised him to 'cleanse his Teeth twice or thrice a day very well with a Tooth-Pick, and then to wash them well with his Water' (p. 83). The toothpick was often also an item of value, made from silver or gold, and often ornate in design. For this reason, they could be gifted. Henry Petroski notes that Elizabeth I herself received 'a gift of six gold toothpicks'.²⁵ They were also often identified as items to be inherited in a person's will; in the will of clergyman Thomas Gataker, it is specified that his 'conscienced friends' should receive 'a pair of silver Tooth-Picks'.²⁶ Toothpicks were often sold as trinkets. The rogue, Footpad, in William Cavendish, Duke of Newcastle's play The Triumphant Widow, Or, The Medley of Humours (1677) peddles his wares via the medium of song and sings of, amongst his catalogue of goods, 'various Pick-tooth Cases' which he claims 'Will enamour all your lasses'.²⁷ The toothpick, or case of toothpicks, was a trinket that was sometimes valuable but ultimately it was a practical accessory; as a result of their value and implied notion of refinement and cleanliness, they soon became a literary symbol of the affected fop.²⁸

Following the death of Sir Thomas Overbury, publisher Lawrence Lisle produced a second edition of his most famous poem 'A Wife' which included elegies by various poets on Overbury's death.²⁹ Annexed onto the end of the collection is a list of characters which gives descriptions of 'the properties of sundry Persons', such as 'A good Woman' and 'An Ignorant Glorie-hunter'.³⁰ The collection of characters was allegedly written by Thomas Overbury and 'others his friends'. The description of 'A Courtier' depicts a man who values fashion above

²³ John Pechey, *The Store-House of Physical Practice* (London: 1695), p. 118.

²⁴ Ysbrand van Diemerbröeck, *The Anatomy of Human Bodies* (London: W. Whitwood, 1694), p. 83.

²⁵ Petroski, *The Toothpick: Technology and Culture*, p. 16.

²⁶ Thomas Gataker, *The Last Will and Testament of Thomas Gataker* (London, 1654), p. 5.

²⁷ Newcastle, William Cavendish, Duke of, *The Triumphant Widow, Or, The Medley of Humours* (London: 1677), p. 5.

²⁸ For example, in *Laugh and Lie Down: Or, The World's Folly*, Cyril Tourneur includes a figure described as 'a nimble witted, and glib-toung'd fellow, who having in his youth, spent his wits in the Art of Love', and describes his accessories as including 'the picktooth in the mouth, the Flower in the Eare, the Brush upon the beard, the kisse of the hand'. See Cyril Tourneur, *Laugh and Lie Down: Or, The World's Folly* (London: Jeffrey Chorlton, 1605), D3^r sig. Also in the works of Thomas Overbury, as discussed below.

²⁹ 'Thomas Overbury (bap. 1581, d. 1613)', Oxford Dictionary of National Biography.

³⁰ Thomas Overbury, Sir Thomas Overburie: His Wife with New Elegies Upon His (Now Knowne) Untimely Death (London: 1616)

all else.³¹ He is superficial and 'puts more confidence in his words than meaning, and more in his pronunciation than his words'. The courtier is a social-climber and a gossip. He demonstrates an affected manner and he 'followes nothing but inconstancie'. The writer advises that you can recognise this man as he wears a 'picke-tooth in his Hat, a cape cloke, and a long stocking'. The collection includes a similar gent known as 'An Affectate Traveller'.³² Like the courtier, 'his discourse sonnds big, but meanes nothing'. According to the writer, the 'affectate traveller' picks up 'ridiculous' fashions from France and Italy and as a result 'his pick-tooth is a maine part of his behaviour'. The toothpick clearly carried associations of pretentiousness and literary writers used it to signify a person with slim selfawareness. In his satire of lawyers in society, Lawyerus Bootatus & Sapurratus, Or, The Long Vacation (1691), Richard Ames presents profiles of various figures who were either being trained to practise law, or were themselves lawyers. One of these figures is described as being 'Reduc'd to very mean Estate' with a 'tatter'd Wastcoat' and a 'Wigg so full of Knots and Stains, / As if't had seen a score *Campaigns*'.³³ The fatigued appearance of the lawyer surprises the narrator as he knew him 'in Term-time' to be 'a might Dressing Sparkish Beau'.³⁴ He once stood at '*Temple Gate*' and 'with Roguish Leering, / Ogling all women who came near him' (p. 17). In order to enhance his fashionable visage he would stand 'with Tooth-Pick fixt in Mouth' (p. 17).

There is further evidence that the toothpick used or displayed conspicuously was regarded as vulgar. Poet Nicholas Breton produced a dialogue between two Greek characters, Chremes and Pamphilus, in which Chremes advises Pamphilus on life matters such as how best to spend his time and how to keep his wife occupied.³⁵ Chremes enquires about Pamphilus's travels and what he has learned from his time overseas; he is keen to impress on Pamphilus the importance of not picking up any affectations or strange fashions from the people he met on his voyage. Amongst his advice he recommends that he 'cover not your balde head with Periwigs of borowed hayre' and 'curle not your beard with hot irons'.³⁶ Chremes is also keen that Pamphilus should 'carry not a picke-tooth in your mouth, a flower in your eare, nor a Glove in your Hat' (C3^r). His reasoning for this advice is that these quirks of attire are 'apish and foolish, devised by idle heads, and worne by shallow wits' (C3^r).

³¹ Overbury, Sir Thomas Overburie: His Wife, C4r sig.

³² Overbury, Sir Thomas Overburie: His Wife, D1^r sig.

³³ Richard Ames, Lawyerus Bootatus & Spurratus, Or, The Long Vacation (London: 1691), p. 17-18.

³⁴ Ames, *Lawyerus Bootatus*, p. 17.

³⁵ Nicholas Breton, An Olde Mans Lesson, And a Young Mans Love (London: 1605)

³⁶ Breton, An Olde Mans Lesson, C3^r sig.

There is also evidence that the use of a toothpick in public was seen as distasteful. In the closing chapter of William Vaughan's text, Naturall and Artificial Directions for Health, where Vaughan offers guidance for living which should prevent the need for medical intervention, Vaughan indirectly offers advice on the social etiquette of using a toothpick. The eleventh instruction directs the reader on how to conduct themselves after meals. He advises the reader 'Labour not either your mind or body presently [...] rather sit a while & discourse of some pleasant matters'.³⁷ Once the conversation has ended, expressed with finesse by Vaughan as 'when you have ended your co-fabulations', he instructs that you should 'wash your face & mouth with cold waters, then go to your chamber, and make cleane your teeth with your toothpicker' (p. 74-5).³⁸ The focus of his instruction is to ensure that the face and mouth are clean, but he clearly stipulates that one should retire to a place of privacy to pick the meat out of your teeth. This is in contrast to other literary texts which imply that a man might carry his toothpick in his mouth in order to present himself as a refined gentleman. Vaughan also recommends that the toothpick should be made of 'ivorie, silver or gold', presumably to prevent rust from the toothpick being used frequently in the watery mouth and also to minimise the chances of the toothpick splinting when being pushed between the teeth.

In the 1640 translation of Lucas Gracián Dantisco's instruction manual *Galateo Espagnal, Or, The Spanish Gallant*, the writer gives instructions on how to conduct yourself in society in order 'to be well esteemed and loved of the people'.³⁹ Its intended audience is made explicit on the title page which asserts the text is 'full of variety, and delight, and very necessary to be perused, not only of the generous youth of this kingdom, but also of all such as are exercised in their gentile education' (p. 1). Instruction number thirty seven advises that, after eating, we must not 'wipe our Teeth with our Napkin, or with our Finger, nor wash our mouth, and so spit out the washing thereof, that all may see thee' (p. 199). The next instruction asks that, on rising from the table, not to 'stand with a picktooth, in our mouth, or any other instrument we use to make them cleane withal [...] nor to stick them in our eares, like a Barber' (p. 199). Dantisco provides further advice on how to conduct yourself with the toothpick and recommends that if you must carry your toothpick around your neck, that you do not 'draw it out' because 'it is strange, to see a Gentleman, draw out of his bosome, an instrument, belonging to a Tooth-drawer' (p. 199-200). Aside from this, he alleges that to

³⁷ Vaughan, Naturall And Artificial Directions for Health, p. 74.

³⁸ 'fabulate' OED entry 1b: To talk or narrate in fables.

³⁹ Lucas Gracián Dantisco, Galateo Espagnol, Or, The Spanish Gallant (London: 1640), p. 1.

display and use to toothpick publically is to give the impression that the gentleman has 'much thought of his belly' and wittily, that 'hee may as well also weare a Spoone about his neck' (p. 200). This text, alongside the Nicholas Breton poem just discussed, suggests a trend that the publically-displayed toothpick was seen as part of a European fashion which permeated England in the sixteenth century which may help explain why this practice was eyed with suspicion.

Rotten or Discoloured Teeth in Literature

Much the same as they are today, rotten, discoloured or missing teeth in early-modern literature were used as shorthand to represent a person who is either aged, unkempt, ugly, poor, stupid, or all of the above. Aging was seen as a process of drying as the humours in the body become less efficient causing a range of physical effects.⁴⁰ Losing one's teeth is almost inevitable with aging. In humoral thinking where the body becomes drier as it ages, the gums recede and this suggests that the connection between toothlessness and old age may have been exaggerated even further. It also stands to reason, especially in the light of William Vaughan's advice on the importance of clearing the mouth of stagnant humours, that a mouth with less moisture in it would be more difficult to keep clean. Toothlessness is discussed later in this chapter, but this section is concerned specifically with the effects of displaying rotten teeth. It will explore the assumptions that were made about a person's health and status based on the colour and state of their teeth and conversely the extent to which white teeth implied a person of robust health. Also, it is interested in what kind of character conspicuously cleans their teeth, usually shown by their wielding of a toothpick.

First, it is important to acknowledge the caricature character in bad dental shape, usually represented as a witch. One of the most famous is Duessa in Edmund Spenser's *The Fairie Queene* who was described as having 'Her teeth out of her rotten gummes were feld, / And her sowre breath abhominably smeld'.⁴¹ Certainly with women in this period, rotten teeth were used to connote rotten morals. Robert Herrick's collection of epigrams *Hesperides, Or, The Workes both Humane & Divine of Robert Herrick, Esq.* (1648) includes a number of short poems which characterize their subject by their teeth. Albeit perhaps

⁴⁰ Nina Taunton, *Fictions of Old Age in Early Modern Literature and Culture* (New York: Routledge, 2007), p. 17.

⁴¹ Edmund Spenser, *The Faerie Queene Disposed into Twelve Books* (London: 1596), p. 118.

tongue-in-cheek, one delivers a clear message to women of unsightly teeth; it is entitled 'To women, to hide their teeth, if they be rotten or rusty'.⁴² He advises:

> Close keep your lips, if that you meane To be accounted inside cleane: For if you cleave them, we shall see There in your teeth much Leprosie.⁴³

As a disease leprosy can attack the mucous membranes of the body including those in the mouth and nose, but in this case it appears Herrick uses leprosy to mean appearing generally diseased and fetid. Superficially, it appears Herrick is advising women with unattractive teeth to keep their mouths closed so society at large does not pass judgement based on the appearance of her mouth. This facetious advice pokes fun at women whose teeth are 'rotten' and 'rusty'. The comparison of the ill-favoured teeth to being leprous also adds a dimension of uncleanness and that which is unsavoury. 'Rusty' in the title of the poem also points towards corroding with age. While there is not necessarily an implication of immoral standards in the woman being described, there is certainly no sympathy extended towards her predicament. Herrick, on the face of it gives advice, but in reality mocks the woman for hoping to present herself as 'clean inside' when her teeth betray her unseemliness (p. 295). In the same collection, Herrick addresses 'one who said she was always young' and informs her:

> You say y'are young; but when your Teeth are told To be but three, Black-ey'd, wee'l think y'are old.⁴⁴

Again, the issue in this poem is not the appearance of the teeth so much as a woman trying to cover up what might be considered evidence of her age. The phrase 'black ey'd' adds extra pinch to the insult as here it implies stained and darkened, but the phrase 'black eyed' meaning to have dark eyes was often denoted as a sign of youth and beauty.

But Herrick's epigrammatic dental jibes were not reserved just for women. Again, in this third poem, 'Upon Glasco', Herrick's fascination with falsehood overrides his distaste for bad teeth. The focus of his poem is a man called Glasco who had lost all of his teeth 'but now some teeth has got' (p. 49). The poet points out that though his teeth will not 'ake, or rot', they will still 'furre' (p. 49). In pointing this out, Herrick concedes that there are advantages

⁴² Robert Herrick, *Hesperides, Or, The Works Both Humane & Divine of Robert Herrick Esq.* (London: 1648), p. 295. ⁴³ Herrick, *Hesperides*, p. 295.

⁴⁴ Herrick, *Hesperides*, p. 201.

to false teeth, but no amount of artificial help can prevent the natural process of decay in the body. He states that Glasco has six teeth, 'twice two' of which are fashioned from some sort of handle ('haft') made of 'mutton-bone' (p. 49).⁴⁵ Furthermore, these teeth are 'not for use, but meerly for the sight' (p. 49). The concluding line of the epigram underlines the temporary nature of the teeth by telling the reader that 'He weares all day, and drawes those teeth at night' (p. 49). Herrick does not make reference to the appearance of the teeth or why Glasco lost his teeth in the first place. But it is clear from this short poem, alongside the two just discussed, that Herrick saw a weakness in those with unfortunate teeth trying to appear as though they did not have a problem. Whether the teeth were lost through age, decay, or disease, there is a degree of shame attached to losing the teeth which makes the owner an easy target for derision in this verse. There are also implications here towards the common assumption that those living in the early-modern period did not care for their teeth. If good teeth were not only considered attractive but also as a sign of good health, and given that there was a clear awareness of tooth decay and discolouring effect of tartar build-up (Herrick's 'furre'), it is unfeasible that such little concern was present about the cleanliness of teeth.

Clergyman Henry Killigrew also made use of rotten teeth in his collection, *Innocui Sales: A Collection of New Epigrams* (1694).⁴⁶ The twenty-fourth epigram in this collection, 'On Lelia', depicts similar distaste to those of Herrick. He lists 'rotten Teeth' amongst 'wrinckles', 'purchast Hair' and 'Paint and Patches' amongst Lelia's virtues. He asserts that if these qualities are what make a woman 'fair', then he knows 'not one with Lelia may compare' (p. 21). He concludes that: 'If Youth it speaks, where Folly does abound, / In all the World not One's more youthful found' (p. 21). Killigrew then implies that his stock character, Lelia, is not only artificial and haggard in her appearance, but she is also foolish. The juxtaposition of wrinkles and rotten teeth with purchased hair, paint and patches creates an almost theatrical image of a crumbling woman trying to hang onto her youth through the use of cosmetics and wigs, but she cannot cover the signs of decay. Killigrew parodies a popular convention of love poetry, particularly the blazon, which forsakes the physical qualities of all other women in the pursuit of flattering his one desire, which renders the impact of the poem somewhat crueller.⁴⁷ Following the convention of epigrams delivering a memorable message, perhaps Killigrew's point was to suggest Lelia's care about her

⁴⁵ 'haft' OED entry 1a.: A handle; esp. that of a cutting or piercing instrument, as a dagger, knife, sickle, etc.

⁴⁶ Henry Killigrew, Innocui Sales: A Collection of New Epigrams, Vol. 1 (London: 1694)

⁴⁷ See Sonnet 15 in Edmund Spencer's sonnet sequence *Amoretti*. Margaret Ferguson et. al (eds.), *The Norton Anthology of Poetry* 5th ed. (London: W.W. Norton, 2005), p. 191.

appearance and health came all too late and a misspent youth has resulted in her haggard visage. Or, they could be designed merely to show that Lelia is of a great age and suggest that she (or women in general) needs to stop battling the aging process in a way which is, according to Killigrew, unbecoming.

Writers would often go to great lengths, and into much detail, to make the teeth appear as unattractive as possible to the reader. One example of this is William Hickes's poem 'On a Beautiful Miss' which was included in his collection of poems and songs, Grammatical Drollery (1682).⁴⁸ The speaker of the poem is supposedly mourning the loss of his wife who 'had every Feature / Of a beautiful Creature' (p. 106). The forced rhymes in the verse such as 'poet' and 'show it' set a comic tone from the outset and the reader soon realises that he is describing a woman who possesses all of the attributes of a conventionally unattractive woman. The speaker describes the woman's oversized, upturned nose, her thin, blue lips and her 'sharp' chin 'which her Nose did so lovingly meet, / That like Sister and Brother / They kist one another' (p. 107). He also tastefully imagines that her upper lip is 'finely turn'd in' and her lower 'stood out' which meant that her mouth was in a position to 'receive from her Snout / The droppings that came from each hole' (p. 106). It is clear that this is a poet showing real determination to evoke disgust from his reader at the thought of the woman he describes. The subject of her teeth receives the focus of three stanzas. Stanza two tells of how her 'Teeth were as black as a coal' (p. 106). The third stanza indicates that the woman is missing a few teeth, but the rest of her mouth was crowded so that 'What in some she deni'd, / She in others suppli'd, / Because there should be no defect' (p. 106). The conclusion of the stanza delivers a strange image of the teeth fitting together with the fastened teeth fitting into the gaps where teeth have been lost. The speaker acknowledges that 'Nature so well had set 'em' so that 'Like Tallies they clapt in between' (p. 106).⁴⁹ The entire fourth stanza expresses appreciation of the way in which the gapped teeth fit together with 'good grace' (p. 106). The speaker says:

> Thus with a good grace They took their due place, And they stood hither and thither; We plainly may see They all did agree, And lovingly met together.

⁴⁸ William Hickes, *Grammatical Drollery* (London: 1682), p. 105-108.

⁴⁹ 'tally' OED entry 4a: Each of the two corresponding halves or parts of anything; a thing, or part, that exactly fits or agrees with another thing or corresponding part.

To stand in a row Is common you know; But the best and the newest way, Is to see, without doubt, Teeth stand in and out, As if they were dancing the Hay. (p. 106)

The verse is certainly memorable, but the poet treads a sensitive line between what is humorous and what could be read as vulgar. Though the intent appears to be to amuse, it must be borne in mind that many of the features that the poet describes are similar to those associated with the aging process, albeit in a greatly exaggerated fashion. The profile of the sunken mouth is very much a stereotypically aged look and loss of teeth often is erratic in the way described, though clearly not with the implied symmetry for comic effect. But what is important is that the writer chose to spend three of the eight stanzas which compose the poem focussing almost exclusively on the mouth and the teeth. This suggests that the mouth and the teeth provided a useful focus for embellishing the sense of ugliness that the poet was trying to convey. The disturbing image of woman's remaining teeth fitting together, animal-like, is amplified further by being told that the teeth are also 'black as coal' (p. 106). The description is even stranger given that it reads as being imaginary, rather than a realistic description of a set of teeth the poet has seen.

Discoloured or rotten teeth were recognised as not necessarily being a consequence of not cleaning the teeth but could signify more generally disordered health. John Pechey, in *The Store-House of Physical Practice*, states that 'Black and Rotten Teeth' are usually a consequence of 'vitious Humours' which cling to the teeth and corrode them, 'ill Vapors, which arise from unwholesome Meats eaten', or from 'Intemperies of the Stomach'.⁵⁰ He also points out that if 'Quick-silver' [mercury] has been administered to the body, or 'to the Face to Beautifie it', then this can also cause 'black or foul teeth' (p. 117). He then makes the observation that due to the use of mercury to produce cosmetics, 'Women that use Paint are wont to have black or foul Teeth' (p. 117). This helps explain why poets, such as Robert Herrick and Henry Killigrew, thought that women who toyed with cosmetic products that were harmful in the name of vanity were fair game when it came to mocking their resulting physical defects. It also supports the notion that there was a particular pressure on women to conform to ideals of feminine beauty with regard to having even, white teeth as having discoloured teeth may imply they have to employ cosmetic help in order to appear beautiful. Pechey gives similar advice to other medical writers discussed earlier in this chapter in terms

⁵⁰ John Pechey, *The Store-House of Physical Practice* (London: 1695), p. 117.

of keeping the teeth clean using linen cloth and various mixtures. He also recommends using the 'Ashes of Tobacco' to 'cleanse and whiten the teeth' (p. 118). Tobacco was recommended by many physicians for medical use, albeit controversially.⁵¹ Amongst his advice on childcare, Pechey offers guidance on how to choose a wet-nurse for children. Aside from the usual signs of health such as strength, appropriate weight and absence of 'Scab, Itch, Scald, or any other filth of the like nature' (p. 438), Pechey recommends that the breath of the nurse be checked to ensure it is not malodorous. He asserts, 'She must have good Eyes, sound and white teeth, not having any rotten or spoiled, lest her breath should smell' (pp. 438-9). He later reiterates that 'She must not have a strong Breath, as they who have a stinking Nose and bad Teeth' because 'the Nurse that constantly kisses the Child, would infect its Lungs by often drawing in the corrupted breath' (p. 439). This indicates that rather than the black teeth being an aesthetic problem, like the necessity of having a 'sweet Voice to please and rejoice the Child', they present an altogether more sinister problem. Because rotten teeth were often explained as a result of the presence of corrupt or pestilent humours, an individual with such dental problems could be believed to be suffering with a disease, rather than simply poor dental hygiene, not least because having bad teeth was often associated with receiving mercurial treatment for venereal disease.

Bad Breath and Mouthwashes

According to the *Oxford English Dictionary*, the English language did not acquire the term 'mouthwash' in print until 1840. However, through the early-modern period, vendors in a variety of guises were selling potions and treatments, and writers were supplying recipes for what amount to what we would call mouthwashes, which were often prescribed for a range of ailments from scurvy to 'the Stinking Breath'.⁵².The closest alternative name for mouthwash used in the period was 'mouthwater', but it was more common for the writer to refer to such a substance in more general terms such as 'very good water for to clense the mouth'.⁵³ Another similar term is the 'gargarism' which, though often used to treat oral complaints, refers to a gargle designed to treat problems in the throat.⁵⁴ Aside from medicinal reasons, mouthwashes were recommended for a number of other benefits including oral cleanliness, fastening of the

⁵¹ Jeffrey Knapp, 'Elizabethan Tobacco', *Representations*, 21 (1988), 26-66 (30).

⁵² Harvey Gideon, *The Vanities of Philosophy & Physick* (London: 1699), fol. 6^v.

⁵³ A.T., A Rich Store-House or Treasury for the Diseased (London: 1596), fol. 42^{v-}.

⁵⁴ 'gargarism' OED entry 1: A gargle.

teeth, tooth whitening, halitosis, and to clear the mouth of any corrupt humours that may have arrived there from the brain (further exploration of the falling of corrupt humours from the brain into the mouth is included in Chapter Two). For example, *A Rich Store-House or Treasury for the Diseased* (1596), by A. T., who is styled as a 'practitioner in physicke', cited above, provides a recipe for a mouth-water which was created for the patient to 'wash his mouth [...] three or foue times in a day' with the result that it 'will clense his mouth of any corruption that shall abide therein, after any Canker or other disease' (p. 41). In common with other contemporaneous recipes for mouthwashes, the basis for this fluid is honey which is to be boiled with a 'peece of Allume as bigge as a good Wallnut' (p. 41).⁵⁵ The writer, A. T., does not mention here any benefits of the mouth-water aside the cleansing and purifying which suggests that oral cleanliness was not only a concern when an individual was displaying obvious signs, such as malodorous breath.

Hannah Woolley was amongst many writers who offered remedies for bad breath. In her compendium of practical domestic counsel as well as medical advice, The Ladies Delight: Or, A Rich Closet of Choice Experiments & Curiosities (1672), Woolley provides a recipe for a concoction which the individual experiencing bad breath should drink every day for fifteen days. This cure involves boiling 'two handfuls of cumming [cumin] Seeds' in 'good Wine'.⁵⁶ Alternatively, the sufferer should 'wash the mouth often with Plantane Water' (p. 271).⁵⁷ Woolley's other remedy is also a drink made of dried 'Oaken Leaves' boiled in white wine (p. 272). The main remedies in this text are liquids to be ingested and this very brief mention of a simple mouthwash suggests that Woolley subscribed to the view that bad breath had its origin in the stomach, rather than the mouth or brain. A text attributed to Elizabeth Grey, Countess of Kent, A Choice Manual, or Rare Secrets in Physick and Chirurgery (1687) differentiates between bad breath that originates in the mouth and the stomach and offers separate remedies for each.⁵⁸ For 'stinking Breath' that originates in the mouth, the text recommends a mouthwash made of 'rosemary leaves and flowers' boiled in white wine 'with a little Cinnamon and Benjamin beaten in power'.⁵⁹ The subtitle of the second remedy states that it is an instruction for 'How to help a stinking Breath that cometh from the Stomach' (p. 230). This remedy is very similar to that offered by Woolley in that it contains 'two handfuls

⁵⁵ 'alum' OED entry 1: A whitish transparent mineral salt, crystallizing in octahedrons, very astringent, used indyeing, tawing skins, and medicine.

⁵⁶ Hannah Woolley, *The Ladies Delight* (London, 1672), p. 271.

⁵⁷ 'plantain-water' OED: 'now *rare* a decoction of plantain'.

⁵⁸ 'Elizabeth Grey, Countess of Kent (1582-1651), Oxford Dictionary of National Biography

⁵⁹ Elizabeth Grey, Countess of Kent, A Choice Manual, or Rare Secrets in Physick and Chirurgery (London, 1687), p. 39.

of Cummin seeds' boiled in white wine and drunk 'as hot as he can suffer it' every day for fifteen days (pp. 230-1).

There were ways of discerning what the source of the bad breath was as outlined by Philip Barrough in The Method of Physicke (1583). Bad breath was often thought to be caused by 'putrefaction' of the mouth, gums or teeth; this was thought to be provoked by corrupt humours lingering in the mouth after the individual had recovered from a disease, such as scurvy. Barrough says that if the fetid breath is caused by putrefaction or by meat stuck between the teeth, this can easily be identified 'by sight or by the patients tale'.⁶⁰ If the breath be caused by ill-humours in the mouth or a 'hot distempure of the mouth', then the patient should feel heat in the mouth itself and be troubled with a great thirst (p. 56). If the corrupt humours have settled in the mouth of the stomach, the breath will smell more pungent before the patient has eaten and be less noticeable afterwards. When the bad breath is caused by ulcerated lungs, the patient will know by 'extenuacion of the body, and by coughing' (p. 56). The remedy for bad breath originating in the mouth of the stomach is to avoid foods which 'doe readily engender corruption in the mouth or stomache' including milk and fish (p. 56). He also advises the patient not to lie down after he eats to ensure that his food is digested properly and does not have time to putrefy at the mouth of the stomach. Barrough's cure for oral bad breath is to purge humours by a combination of bloodletting, cupping, and medicines to provoke detoxification of the humours combined with use of a mouthwash which he provides recipes for (p. 57).

Preacher Thomas Adams plays on the notion of whether bad breath originates in the mouth or the stomach in his text *Diseases of the Soule: A Discourse Divine, Morall, and Physicall* (1616).⁶¹ This text uses disorders in parts of the body from the head downwards to structure his commentary on a series of human vices. For example, the fourth instance compares consumption to envy by highlighting how consumption is a 'languishing disease' whilst envy is a 'spiritual sickness' which is also a 'consumption of the flesh and a pining away of the spirits' (p. 17). Adams extends the metaphor as far as he can by, in parody of medical texts which use the same structure, including further sections of each 'disease', namely 'Cause', 'Signes and Symptomes' and 'Cure'. 'Stinking breath' is the eighteenth disease in Adam's list and is compared with flattery (p. 67). Adams lists the potential causes of bad breath as follows:

⁶⁰ Philip Barrough, *The Method of Physicke* (London, 1583), p. 56.

⁶¹ Thomas Adams, *Diseases of the Soule* (London, 1616).

1. sometimes through putrefaction of the gummes. Secondly, sometimes through hote distemper of the mouth. Thirdly, sometimes through corrupt and rotten humours in the mouth of the stomach. Fourthly, and not seldome through the exulceration of the lungs.

(p. 67)

Adams uses his comparison of flattery with halitosis to initiate his argument against the flatterer. He points out that 'if the cause of this *Stench* be in the mouth, it is discerned: if in the vicious stomake or ulcerated lungs, it is allayd by eating' (p. 68). He compares this to the flatterer whose 'stomake is well layd after dinner; and til he grow hungry again his adulatory pipes goe not so hotely' (p. 67). This is as far as the metaphor is adopted in this section as once he has launched his argument, Adams takes the opportunity to rail against flatterers on a more general level. He returns to the metaphor at the close of the section by stating that the flatterer must change his ways for 'Repentance and Obedience can only make his *breath* sweet' (p. 70).

It is fair to assume that oral hygiene in this period would be unrecognisable to us in an age of electric toothbrushes and dedicated oral hygienists, but it is also important not to make additional assumptions about what care the individual might have taken of the health of their mouth with the materials and advice they had available. It is safe to say from the number of remedies devised and the way bad breath appears in literary use (which will be analysed later in this chapter) that foul-smelling breath carried enough of a stigma to be noticed and created a market for mouthwashes and other teeth cleaning aids such as 'dentifrices'.⁶² It appears from the kind of advice offered that some people were thought to be more prone to bad breath than others, as physicians tend to treat it as though the problem is chronic, rather than acute. 'Student in physick', Thomas Collins addresses the problem of how to 'take away stinking of the mouth' in his text *Choice and Rare Experiments in Physick and Chirurgery* (1658).⁶³ Collins suggests that the sufferer needs to develop a ritual for cleaning his mouth in order to combat the putrid smell there. He states that:

Ye must wash his mouth with water and Vinegar, and chew Mastick a good while, and then wash thy mouth with the decoction of Anniseeds, Mintes and Cloves sodden in wine. Ye must wash your mouth before and after meat with warm water, for to cleanse the mouth, and to purge the humours from the Gums

⁶² 'dentifrice' OED entry 1: A powder or other preparation for rubbing or cleansing the teeth; a tooth-powder or tooth-paste; also applied to liquid preparations.

⁶³ Thomas Collins, *Choice and Rare Experiments in Physick and Chirurgery* (London, 1658), p. 43.

which descend out of the head, it is good every morning fasting to wash your mouth, and to rub the Teeth with a safe leave.⁶⁴

(p. 43)

This begs the question of whether cleaning the mouth only became an issue or a habit once a problem, such as bad breath, arose. The remedy provided in *A Rich Store-House* by A. T. gives his recipe for the mouthwash as described earlier in this chapter, but he adds at the end: 'this will clense his mouth of any corruption that shall abide therein, after any Canker or other disease' (p. 41).

Bad Breath in Literature

Due to the fact that bad breath is a personal problem but usually detected by others, it is an easy quality for writers to assign to a character to give them an unsavoury edge. Not only this, but a case of bad breath provided ample opportunity for humour and mockery. It was also sometimes used to intimate the presence of disease or a person of poor character. One of the most famous instances of supposed unsavoury breath in early-modern literature is that of the mistress in William Shakespeare's Sonnet 130. As he lists the unpretentious qualities of his mistress when compared to the usual unearthly goddess depicted in love poetry, he famously points out that 'in some perfumes is there more delight / Than in the breath that from my mistress reeks' (7-8).⁶⁵ In fairness to the subject of the poem, the verdict on her breath is not necessarily scathing. The speaker merely observes that her breath is not necessarily as sweet as 'some perfumes', rather than offensively malodorous. John Kerrigan highlights that these lines are all too often read in light of the more modern definition of 'reek' which means 'To give off an unpleasant smell' (OED). Although the earliest written instance of 'reek' in this sense is given in 1609 which feasibly means this definition was known at the time of Shakespeare's writing, Kerrigan argues that it was more likely Shakespeare was using the term with the definition that was dominant at the time which was more akin to the word 'emit'.⁶⁶ What is at hand in this sonnet, then, is not a woman with

⁶⁴ This section has been taken from an earlier source; it can be found verbatim in Jean Goeurot's *The Regiment* of Life, Whereunto is Added a Treatise of Pestilence (London: Edward Whitchurche, 1550) and later in Thomas Vicary's *The English-mans Treasure with the True Anatomie of Mans Body* (London: B. Aslop, 1641). The latter seems the more likely source for Collins due to the text's popularity and number of editions. Collins has omitted the idea that both Goeurot and Vicary include which is, if the stench originates from a rotten tooth, it should be pulled out.

⁶⁵ William Shakespeare, *The Sonnets and a Lover's Complaint* (London: Penguin, 1997), p. 141.

⁶⁶ Shakespeare, *The Sonnets and a Lover's Complaint*, p. 360.

stinking breath but a poet grounding exaggerated descriptions of a woman's breath being like 'perfume'.

There was certainly an awareness in the early-modern period that the breath could be at its most fragrant first thing in the morning, or at any time when the individual had not eaten. Nicholas Culpeper's 1657 translation of Joannes Jonstonus's The Idea of Practical *Physick* notes that bad breath that is caused by rotting teeth, is worse when the person has not eaten recently: 'for the most part, those that have such Teeth, when they are fasting send forth a stinking and Unsavoury breath or Vapor^{,67} Dutch physician Levinus Lemnius provided even further detail as to why this might be the case in the 1658 edition of The Secret Miracles of Nature. Chapter 46 focusses on 'the operation [purpose] of Man's spittle'.⁶⁸ Lemnius purports that the spittle of a man who has been fasting, which he defines as 'when he hath neither eat nor drunk before the use of it', has healing properties (p. 164). He claims that 'it cures all tetters, itch scabs, pushes and creeping sores' (p. 164).⁶⁹ In contrast to this, Lemnius also asserts that the spittle has 'a venemous quality, and secret poison' which it garners 'from the foulnesse of the teeth in part, and partly from vitious humours' (p. 165). He explains that these 'vitious humours' rise to the mouth from the stomach and it is for this reason that we 'sometimes perceive a salt, sowre, sweet, or sharp taste in our spittle' (p. 165). It is for this reason that the breath smells worse when the person is fasting because the 'moisture that swims in the mouth and moystneth the tongue' is 'a flematique excrement, that ariseth from the stomach' (p. 165). Lemnius describes fasting breath as a vapour that 'stinks exceedingly, and the unsavourinesse of the breath offends all near us that talk with us' (p. 165). This awareness of the potentially rank nature of fasting breath was also reflected in literature of the period.

Beginning with Shakespeare, the third act of *Two Gentlemen of Verona* contains an exchange between Lance and Speed, servants to Proteus and Valentine respectively. In this scene, the first of act three, Lance talks of his beloved and shows Speed a piece of paper which lists her virtues and vices.⁷⁰ Speed takes the 'catalogue of her conditions' and begins to read them aloud and Lance interjects with a qualifying statement for each (III.1.259). For example, Speed reads: '*Item*, [also] she doth talk in her sleep', to which Lance replies: 'It's

⁶⁷ Joannes Jonstonus, The Idea of Practical Physyck (London, 1657), p. 65.

⁶⁸ Levinus Lemnius, The Secrets Miracles of Nature: In Four Books (London, 1658), p. 164.

⁶⁹ 'tetter' OED entry 1: A general term for any pustular herpetiform eruption of the skin, such as eczema, herpes, impetigo, ringworm, etc.

^{&#}x27;push' OED entry 1: A pustule, a pimple, a boil.

⁷⁰ William Shakespeare, *The Norton Shakespeare: Based on the Oxford Edition* (London: W. W. Norton, 1997).

no matter for that, so she sleep not in her talk' (III.1.119-20). Regarding her oral health, Speed recites:

Speed: *Item*, she is not to be broken [tamed] with fasting, in respect of her breath. Lance: Well, that fault may be mended with a breakfast. Read on. Speed: *Item*, she hath a sweet mouth. Lance: That makes amends for her sour breath. (III.1.313-18)

The implication here is that punishing his wife by not feeding her would be a worse punishment for himself because her fasting breath is so much worse than her usual breath.⁷¹ By playing on the idea that the consumption of food lessens the problem of bad breath, Shakespeare gives Lance the opportunity to pun on the term 'broken' by claiming, in his desperation to provide an answer for all her faults, that she can be cured with 'breakfast'. Lance also manages to comfort himself with the contrived logic that his beloved's 'sweet mouth' [sweet tooth] will also make up for the fact she has 'sour breath'. Aside from her having 'more hair than wit', her mouth is the only part of her body that the catalogue draws attention to. Such is Lance's determination to see only the positive traits of this woman, his response to her toothlessness is that he 'cares not for that, because I love crusts' (III.1.229). This exchange is full of witticisms and puns, and it seems that the stinking breath and the fact 'she hath no teeth' acts as a quick and comical way for Shakespeare to ensure that the woman who Lance wants to court appears unappealing, especially as a potential lover.

Ben Jonson shares similar concerns in his comedy *Epicoene*, *Or*, *The Silent Woman*. In act four scene one, the three conspirators, Dauphine, True-Wit and Clerimont take a rest from the revelries they have brought to the house of Morose, described in the Dramatic Personae as 'A Gentleman that loves no noyse', who has just got married.⁷² The party has been set up in order to provoke Morose into wanting a divorce from his wife, the eponymous 'silent woman', so that Dauphine can bribe him into reinstating him as his heir. The three men take the opportunity to discuss their own personal standards when it comes to the female sex. Cleriment expresses his appreciation of Lady Haughty, who he says 'lookes well today' (IV.1.28). True-Wit is the most forthcoming with his opinion and gives a wealth of advice on what women 'ought' to do in order to present themselves well. Among such practical advice as 'if she be short, let her sit much' and 'if she have an ill foot, let her wear her gown the

⁷¹ There has been several versions of this line printed across editions. Shakespeare's First Folio (1623) omits the words 'broken with' and simply advises that 'shee is not to be fasting in respect of her breath'. Some more modern editions replace the words 'broken with' with 'kissing'. Even with this amendments the basic principle is that her breath is to be avoided first thing in the morning before she has eaten, as implied by the cure of breakfast.

⁷² Ben Jonson, 'Epicene', *The Alchemist and Other Plays* (Oxford: Oxford University Press, 1998), p. 121.

longer and her shoe the thinner', True-Wit recommends that if a woman have 'a sour breath, let her never discourse fasting, and always talk at her distance'. Also, if she has 'black and rugged teeth' she needs to mind that she does not laugh too often, especially if she laugh wide and open' (IV.1.34-41). This is practical, if patronising, advice from True-Wit and it underlines the fact that it was commonly accepted in early-modern society that bad breath is worsened by an empty stomach. Further to this, unsavoury breath is again used to generate a laugh at the expense of an absent female. The literary evidence suggests, thus far, that bad breath was considered particularly distasteful in a woman. The scenes discussed in both *Epicoene* and *Two Gentlemen of Verona* are discussions between men about what makes a good woman, and both target the mouth as a source of potential repulsion, if it be in bad health or omitting a foul smell.

Thomas Middleton's masque, *The Inner Temple Masque, Or, Masque of Heroes*, opens with Doctor Almanacke talking about the year that has just ended when he is greeted by a character personifying a Fasting-Day.⁷³ Fasting-day is complaining about his unpopularity with the general public. Plum-porridge makes his entrance, a 'plumpe and lustie' character who is the 'big-swolne enemy' of fasting day.⁷⁴ Fasting-Day is hopeful that Plum-porridge will welcome him as 'hee moves like one of the great Porridge Tubs, going to the counter' (sig. A3^v). On the contrary, Plum-Porridge launches a scathing attack on Fasting-Day. It needs to be reproduced in its entirety in order to be fully appreciated:

Plum-Porridge: Oh killing cruel sight, yonder's a *Fasting Day:* A leane spinie Rascall with a Dogge in's belly, his very Bowels barke with hunger; avaunt, thy Breath stinkes, I doe not love to meete thee fasting, thou art nothing but wind, thy Stomack's full of Farts, as if they had lost their way, and thou made with the wrong end upward, like a Dutch Mawe, that discharges into 'th Mouth!⁷⁵

 $(sig. A3^{v})$

The exchange between Fasting-Day and Plum-Porridge is clearly abstract as they are embodiments of restraint and indulgence, but Plum-Porridge's diatribe relies on the understanding that bad breath is worsened on an empty stomach. Plum-Porridge pushes this idea further by claming that the 'very Bowels barke with hunger' and the effect is grotesque.

⁷³ 'fast-day' OED entry 1: a fast observed on one day in the week preceding the yearly or half-yearly Communion Sunday.

⁷⁴ Thomas Middleton, *The Inner Temple Masque, Or, Masque of Heroes* (London, 1619), sig. A3^v.

^{&#}x27;plum-porridge' OED entry: 'A thick soup or porridge containing raisins, currants, spices, etc., often flavoured with brandy, claret, or another liquor and traditionally served at Christmas.

⁷⁵ 'maw' OED entry 1a: The stomach of an aimal or (now *Brit.regional or humorous*) of a person.

In Aphra Behn's comedy Sir Patient Fancy, the titular character, described in the Dramatic Personae as 'an old Rich Alderman', has been convinced that he is ill to prevent him leaving the city for his country house and taking his young wife, thus separating long-term lovers Lady Fancy and Wittmore.⁷⁶ One of the false doctors brought in to convince Sir Patient Fancy of his imminent demise is called Brunswick and he asks Sir Patient Fancy if he has 'a certain wambling Pain in your Stomach sir' (V.1.357).⁷⁷ Sir Patient Fancy responds by saving that he does have a pain 'very great' and it is worsened when he does not eat in the morning (V.1.359). Sir Credulous Easy responds by saying I know it [that he had been fasting] by your stinking breath Sir' (V.1.360). In this statement, Sir Credulous Easy is not only humiliating the 'old Rich Alderman', he is also increasing his sense of illness and putrefaction as the ill-smelling breath would be thought to reflect what was happening in the stomach. He also draws attention to Sir Patient Fancy's age as bad breath was often associated with aging. As the aging body was dryer, it was also more likely to become putrefied.⁷⁸ The punchline of an epigram included in Robert Heath's collection Clarastella also uses the association between old age and bad breath. Entitled 'On *Fine*', the verse states:

> *Fine* carries 'bout him strong perfumes to please The Ladies sweeter comp'nie, nothing els? Yet: his breath stunck before of's old disease, Hoping to hide which, now as strong he smels.⁷⁹

On first reading, it is possible to suppose that the speaker is inferring that Fine's bad breath is the remnants of a disease he has had in the past, but the name Fine, derived from Latin 'finis' meaning 'end', suggests that the poem is actually poking fun at his inability to cover up bad breath caused by his aging.

Conclusion of Chapter One

The first chapter of this thesis is designed to provide background information about the range of advice that was available to early-modern society in terms of how to maintain

⁷⁶ Aphra Behn, *The Works of Aphra Behn: Volume 6* (London: Pickering and Chatto, 1996), p. 6.

⁷⁷ 'wamble' OED entry 1.: A rolling or uneasiness in the stomach; a feeling of nausea.

⁷⁸ Nina Taunton, *Fictions of Old Age in Early Modern Literature and Culture* (New York: Routledge, 2007), p. 15-16.

 ⁷⁹ Robert Heath, *Clarastella, Together with Poems, Occasional, Elegies, Epigrams, Satyrs* (London, 1650), p. 28.

their oral health. Though academic work on the subject has improved, outside of the history of dentistry, there is still a common assumption that people in this era did not care for their teeth and this is what accounts for the high rates of tooth decay. Evidence presented in this chapter implies that people were being advised to keep their teeth clean, either through daily cleansing or by visiting their local barber-surgeon for a toothscraping treatment. As is true today, a full set of teeth do not often last a human lifetime, and the ways in which teeth could be preserved then were naturally less effective than the orthodontic and restorative dentistry we have access to today. It is difficult to ascertain why the toothbrush took so long to reach British shores, especially when the use of the toothpick seems to have been influenced by European culture. The action of rubbing the teeth using a piece of linen cloth dipped in a concoction designed for cleaning the teeth is not dissimilar to the toothbrush/toothpaste combination we use today. Reflecting on a collection of recipes and methods for keeping the mouth clean, from writers across the period, is not to suppose that every individual in early-modern society maintained a daily tooth-cleaning ritual. But by the same token, it seems unlikely that the majority of individuals living in this era would notice the presence of tartar on their teeth causing discoloration and not wish to remove it, especially given the literary beauty ideal of having pearly-white teeth.

There can be no doubt that offering services which claimed to fasten, whiten or clean the teeth was a reliable way of generating income. With the provision of false teeth being so poor, the thought of losing one's teeth must have proposed a terrifying prospect. Further to this, as will be discussed at length in Chapter Two, it was understood that one of the causes of toothache was tooth decay and it therefore makes sense that remedies and services purporting to prevent this process would appeal to people who feared neglecting their oral health may result in needing to have teeth pulled out. With many of the medical treatments in this period relying on processes of purging, such as bloodletting, it is not difficult to imagine that the person who notices their teeth are starting to discolour, or has it pointed out that their breath has a noticeably bad smell, might become anxious about what is causing the problem. Whereas today we are more likely to assume that it is a simple case of tooth decay or a dental abscess which can be remedied by the dentist, the person living in an early-modern body, whose good health indicated that the humours that compose the body are well-balanced, may worry that there is something more concerning happening in relation to their condition. Literary materials which use the presence of unattractive teeth or bad breath to indicate a less-than-savoury character only work if there is a cultural framework in which the joke makes sense. If badly discoloured or missing teeth, or putrid breath were the accepted norm in early-modern society, then the joke becomes less funny to the audience it is designed to appeal to. There is the argument that the audience finds humour in the truth, but the examples presented in this chapter demonstrate that the instance in which these physical attributes are used are too specific, and too pointed, to be presented as universally self-referential humour. The aim is not to overturn existing research which rightly highlights the problem of oral health in this period, and that even the existing treatments designed for preserving the teeth could not stop the inevitable deterioration, but to highlight the dangers of making assumptions about a society's behaviours based on evidence which points to a certain conclusion. It is not to assert that previous assumptions should all be ignored, but to address the question, how important was it to the average individual living in early-modern England to keep their teeth clean and maintain a good level of oral health?

<u>Chapter Two</u> <u>'That fierce Friend of Hell / Which in a *hollow tooth* doth love to dwell': Toothache in <u>Early-Modern Literature</u></u>

This chapter will seek to explore the ways in which toothache was presented in early-modern literature. In addition, it will unveil some remarkable cultural ideas concerning the teeth, which hitherto have been under-researched. Dentistry, as a discipline in itself, was not formalised until the early nineteenth century, which has meant that histories of dental treatment tend to concentrate on the very early treatment of dental problems in Ancient Greece and Rome and then make a leap to the French 'father of Dentistry', Pierre Fouchard in the first half of the eighteenth century. This trend has been noted by A. S. Hargreaves, in White as Whales Bone: Dental Services in Early Modern England, who attributes the limited interest in early-modern dentistry mainly to a shortage of primary materials. She also describes a 'disinclination to take the subject seriously', as well as a reticence to consider materials beyond ancient artefacts, or medical texts or official records (of which there is naturally very little identifying dental practitioners as it was not recognised as a discrete occupation).¹ Whilst highlighting the importance of taking literary material into consideration, Hargreaves is also quick to point out the danger of extrapolating supposedly factual information from a characterisation or literary technique. This concurs with a key aspect of the methodology within this thesis: to use a range of materials in a sensitive manner to build upon existing assumptions and uncover previously unconsidered sources in relation to well-studied areas of research. 'Toothache', apart from being a complaint commonly recognisable to a present-day reader, provides a useful anchor for research in this way as it is presented in both medical and literary texts of the period.

There has, of course, been research published on treatment of the teeth in the earlymodern period. One of the most significant texts is Malvin E. Ring's sizeable *Dentistry: An Illustrated History* published in 1985. Though Ring's study is largely based in the U. S., it contains chapters centred on 'Dentistry and Oral Hygiene in the British Isles' during the Renaissance and 'Scientific Discoveries' and 'Medical Practice' in seventeenth-century Europe. This resource also encompasses dental research from 'the primitive world' of pre-Columbian America through to the twentieth century. Similarly, *History of Dentistry* by Walter Hoggman-Axthelm also aims to give a world view on the history of dentistry and usefully includes a detailed chapter on what was contained in medical sources in relation to

¹A.S. Hargreaves, *White as Whales Bone* (Leeds: Northern Universities Press, 1998), p. 3.

dental health in the sixteenth and seventeenth centuries, though perhaps due to relative inactivity, or to a relative sparseness of records in England, the chapters tend to focus on mainland Europe.² In the aforementioned *White as Whales Bone*, Hargreaves retains a healthy scepticism in relation to making generalisations based on scant textual evidence about the lives of people who belong to a certain era. She also acknowledges the importance of using literary, as well as medical, texts from the early-modern period in order to gain a more general sense of the cultural perception of teeth and dental treatment. Generally speaking, work on the history of tooth treatment tends to be carried out by people practising or formerly practising dentistry with an interest in its history, or by medical historians. There is also attention paid to the role of barber-surgeons in the early-modern period who, it appears, were the primary givers of treatment to the teeth, namely tooth-pulling and cleaning.³ Toothache is presented both in medical and literary material as being one of the most intolerable experiences a person can suffer. This is understandable given the absence of effective anaesthesia or dependable pain killers; further, the location of the tooth in the mouth would mean that functions such as eating and speaking are likely to be affected by the disorder, and the patient is likely to anticipate that the corrupt tooth will need to be pulled out. These factors combined help us to understand why the toothache may have presented an earlymodern sufferer with a fair amount of anxiety, not to mention pain that was unbridled.

Barber-Surgeons, Surgeons and Operators for the Teeth

One element of the history of dental treatment that can be identified with some certainty is the dates that the profession of people delivering such services changed in the eyes of the authorities. In 1540, an Act of Parliament officially united the Barber-Surgeons' Company and the Fellowship of Surgeons.⁴ According to W. J. Bishop, the new regulating body was entitled the 'Masters or Governors of the Mystery and Commonality of the Barbers and Surgeons of London' and the ruling shortly followed that 'surgeons should no longer be barbers and that barbers should restrict their surgery to dentistry'.⁵ Celeste Chamberland details this distinction further by describing how the guild was divided into barbers and

³ Hargreaves, White as Whales Bone, p. 3.

² Walter Hoffman-Axthelm, *History of Dentistry*, trans. by H.M. Koehler (Chicago: Quintessence, 1981).

⁴ Jessie Dobson and R. Milnes Walker, *Barbers and Barber-Surgeons of London* (Oxford: Alden Press, 1979), p. 31.

⁵ W.J. Bishop, *The Early History of Surgery* (London: Scientific Book Guilld, 1961), p. 87.

surgeons.⁶ On paper, the barbers were limited to 'bloodletting, removing teeth, and lancing boils' and the surgeons' responsibilities included 'trepanning' and 'setting bones'.⁷ In reality, Chamberland suggests, the boundaries were less concrete due to the shared membership of, and regulation by the all-encompassing Barber Surgeons' Company.

That these boundaries were blurred is supported by references over the period which refer to 'surgeons' removing teeth and also those who continue to separate 'barber surgeons' from the more specialised 'tooth drawers'. In Thomas D'Urfey's The Royalist, for example, the eponymous royalist Charles Kinglove bids his mistress, Camilla, complete three tasks in order to prove her love for him; one of these tasks is to present him with two of her husband's teeth. She therefore convinces her husband, Sir Oliver Oldcut, that his teeth are 'monstrous [...] as black as ink' causing his breath to be 'most pestilential'.⁸ Camilla and her female attendant, Crape, convince Oldcut that he must have his teeth pulled out before they 'poison all [his] Wit, and utterly ruine all [his] excellent Discourse of State-policy' (p. 40). With urgency, Oldcut calls for 'a Surgeon' to extract his teeth and Camilla bids the Surgeon 'pull out two of the soundest' ones (IV.1). The questionable 'Surgeon' enters and embraces his role in Camilla's trick by bamboozling Oldcut with medical jargon about the dangers of leaving his rotten teeth in his mouth a moment longer. On his removal of the second tooth from Oldcut's mouth, Oldcut bewails that his 'jaws are torn in pieces' (IV.1). It is unclear whether the botched tooth extraction is a result of a lack of skill in the surgeon, or because he was pulling out a healthy tooth. In either case, to alleviate any doubt over the surgeon's indecency, following his exit Camilla sends Crape after him with a bribe to keep her trick a secret, stating that 'money is as great an incouragement to a mercenary fool, as a beautifull Mistress is to a man of Wit' (IV.1). D'Urfey's decision to refer to the tooth-drawer as a Surgeon is not evidence enough in itself to infer that this was the norm; however, it does suggest that the boundary between the professions was sufficiently blurred that this reference would not strike the audience as anomalous.

According to the OED, the first mention of the word 'dentist' is from the French 'dentiste' in British print in 1759, and English did not contain the word 'dentistry' until towards the mid-nineteenth century. There were, however, alternative titles that signified a medical practitioner who specialised in looking after teeth. In the mid-sixteenth century the title 'Operator for the Teeth' emerged, and became especially fashionable in courtly circles.

⁶ Celeste Chamberland, 'Honor, Brotherhood, and the Corporate Ethos of London's Barber-Surgeons' Company', *Journal of the History of Medicine and Allied Sciences*, 64 (2009), 305.

⁷ Bishop, *The Early History of Surgery*, p. 306.

⁸ Thomas D'Urfey, *The Royalist: A Comedy* (London, 1682), IV.1, p.42.

From this point on, royal households often appointed an 'Operator for the Teeth'. Catherine of Braganza appointed a Thomas Middleton, who was 'apprenticed to a barber', of the London Company of Barber-Surgeons, as Operator for the Teeth in 1662.⁹ The royal acquisition of 'operators for the teeth' is also corroborated by Edward Chamberlayne's 1669 edition of *Angliae Notitia*, which includes an inventory of the employees of the Household of Charles II.¹⁰ In a short-list of 'Physitians in Ordinary to His Majesties Person', Chamberlayne numbers the 'Physitians in Ordinary to the Household' and these include 'Operators for the Teeth, 2'.¹¹ It is interesting to note that the 'operators' warrant an entry separate from that for the earlier listed 'Chirurgeons' or 'Barbers'.

Causes of Toothache

There is no doubt that those living in the early-modern era were aware of tooth decay and the dangers, to both appearance and health, of having rotten teeth, as discussed in Chapter One. In The Operator for the Teeth, Charles Allen gave a detailed description of how to manage a tooth that is rotting in order to, as far as possible, preserve the tooth's function. He advises that 'as long as they do not ake', a person should 'keep his teeth as long as he can' unless they are prone to aching, in which case there is a danger that 'they should occasion an ill habit in the Gums, that might be hurtful to the sound ones' (p. 16). Allen also suggests that if a rotten tooth is cleaned and stopped with 'such ingredients as are neither corrosive, nor ill tasted, and of a consistence firm enough to be used in the same manner as a Teeth are', the tooth can 'still do good service' (p. 15). If a tooth is so hollow that it cannot be filled, the owner must be 'taking care after every meal to pick out any meat that may get into it', as failure to do so may mean 'the corruption of the rotten Tooth will fall upon the others [teeth], and so infect all the rest'. There is also an awareness of the kinds of foods that might cause tooth decay. In act four of John Webster's play, The Devil's Law-Case, Leonora's waiting woman, Winifred, has given evidence of her mistress's adultery to support her claim that her son Romelio is a bastard, and therefore has no legitimate claim upon his family estate.¹² Once the judge's disguise is unveiled and he is revealed to be Crispiano, the man with whom Leonora is claimed to have had the affair, the ruse unfurls and Ariosto is left to clarify the details of the case. Earlier, Winifred had been intentionally evasive about her real age, claiming to be

⁹ Hargreaves, White as Whales Bone, p. 101.

¹⁰ Edward Chamberlayne, Angliae Notitia (London, 1669), p. 278.

¹¹ Chamberlayne, Angliae Notitia, p. 278.

¹² John Webster, *The Devil's Law Case* (London, 1623), p. 36.

'about six and fortie', meaning she was present at the time of Romelio's conception, and Ariosto is keen to establish her real age. Winifred then later reveals she is 'not five and twentie' claiming that her mistress made her 'colour my haire with Bean-Flower, / To seeme older then I was; and then my rotten teeth, / With eating sweet-meats'.¹³ This indicates that there had long been an association between certain foods and the deterioration of the teeth. In a medical text mentioned earlier, *The Castell of Health*, Thomas Elyot gives a list of 'Meates which doe hurt the teeth'.¹⁴ These include:

Toothache arising from decay which is perceptible by inflamed gums and/or hollow teeth seems to be separated from toothache arising from a more general cause.

Analysis of early-modern understandings of what else may have caused the toothache provides further insight into what might have made the occurrence of dental pain a deeper source of disquiet. Philip Barrough's sixteenth-century text, The Method of Phisicke, first published in 1583, was reproduced in seven further editions by 1652.¹⁵ In this popular text, Barrough includes a chapter on toothache, asserting that 'toothache (as Galene sayth, amongest other paines that are not mortall, is the most cruell and grevous of them all)' (p. 55). The chapter is predominantly concerned with cures for toothache but it does suggest potential causes. Barrough explains that toothache is 'caused sometymes of hote or cold distempure' and also 'many tymes through flowing humours out of the head unto the rootes of the teeth, which with ther sharpnes either doe gnaw about them, or els with their abundance, they engender like greife in the teeth' (p. 55). Developing this idea further, he informs his reader that if the pain is caused by an excess of humours, 'the greavous pain is not only felt in the teeth but also in other partes, which it passeth by' (p. 55). This might suggest that what now would be interpreted as toothache is thought to be caused by a dental, gingival or jaw problem, it is more likely that in this period medical understanding indicates that a toothache was a sign of more generally disordered health. This is reinforced by the way in which the same cures are often offered for the toothache as for more generalised health complaints elsewhere in the body. Rather than the suggested cure being offered as a universal panacea,

Very hot meates, Nuts, Sweet meates and drinkes. Radish rootes, Hard meates, Milke, Bitter meates. Much vomit, Leekes, Fish fat, Limons, Coleworts. (p. 21).

¹³ Webster, *The Devil's Law Case*, p. 36.

¹⁴ Thomas Elyot, *The Castell of Health* (London, 1595), p. 21.

¹⁵ Philip Barrough, *Method of Phisicke* (London, 1583).

the same ailments are often listed as being treated in the same way as a toothache. These ailments include stomach complaints, gout, and dropsy which are all often associated with defluxion of humours.

The most significant text published in the seventeenth century in relation to dental care, is Charles Allen's *The Operator for the Teeth*.¹⁶ Widely believed to be the first work published in the English language dedicated solely to the care of teeth, this text is an invaluable source for the kinds of advice that may have been propagated to the general public. Usefully, much of Allen's expertise appears to be based on hand-on experience of dealing with patients and their ailments. Allen details two causes of toothache. The first suggests that if too much blood or blood that has been agitated passes through the nerve of the tooth, then the flow can be interrupted and this blockage causes great pain. He also asserts that the patient may recognise this type of toothache by 'the high beating of your Pulse, the fulness of the Veins, and an often beating in the affected Tooth' (p. 25). Allen also states that the discomfort experienced should be 'continual, tho not very extreme pain', unless the influx of blood is great enough to 'distend the membrane that contains the vessels' which then causes a 'great pain' (pp. 24-5). The method of cure offered for toothache caused by too rapid influx of blood is, of course, to 'bleed the gum, and sometimes open a Vein in the Arm also'. For further relief, Allen suggests washing the mouth out with Rose-water and Vinegar, mixed in equal quantities (p. 25). He also imparts that if the tooth is hollow, the patient should put 'a little Cotton dipt in *Oyl of Box*¹⁷ into the Tooth (p. 25). On the matter of disrupted blood flow causing pain in the teeth, Allen adds that if the blood involved in the production of animal spirits in the brain is not efficiently purified, then this corrupt blood can find its way into other parts of the body where it will 'breed a disturbance' and 'excite great pain'. This particular type of pain will only cease once the corrupt blood 'be expelled from thence by transpiration' (p. 26).

The second type of toothache detailed by Allen here is that which is recognised by 'a disturbance in the head, which precedes it most commonly; a soreness in the joints, and a certain drousiness, and lingring pain all over the body, as if one were inclined to an ague' (p. 26). These symptoms seem to suggest what we would understand more recently as being influenza, or even a common cold. As touched upon earlier, this reinforces the idea that

¹⁶ Charles Allen, *The Operator for the Teeth* (Dublin, 1686).

¹⁷ 'oil of box': oil of the box tree as described by seventeenth-century physician, Robert Bayfield, in *Tēs iatrikēs Karpos (1663):* 'This oil is drawn in a Retort, with a reverberating heat; first, infusing the dust thereof in white-Wine twenty four hours, and then stilling all together: First, there comes away an acid water, which doth good in the tooth-ach, onely by washing the teeth therewith; after that comes the oil, which is to be diligently preserved' (p. 171).

where today we might see toothache as a result of isolated tooth decay or abscess, in the early-modern period it appears to be more heavily indicative of generally disordered health. Allen himself says that 'it is but rarely, that a Tooth-ake is found *simple*, or *uncompound*: [...] that is, occasioned by one cause only: but it proceeds most commonly from several; and especially if the pain be inveterate, or of a long standing' (p. 27). The cure for toothache caused by corrupt humours, according to Allen, 'may be effected by Sternutation [i.e., sneezing], the *friction* of the *nape* of the Neck with warm clothes, and the application of aperitive Remedies, to open the pores of the Tooth' (p. 26). As expected, the suggested cures are all related to the purgation of corrupt humours. If the tooth is hollow, the advice here is to apply oil of camphor infused with henbane-root.¹⁸ Henbane plays a complicated role in the history of toothache due to its believed ability to eradicate the pain-inducing toothworm by fumigation; according to Hoffman-Axhelme, evidence of using toothworm as an explanation of dental pain dates as far back as Ancient Greece.¹⁹ It was documented by John Gerard that mountebanks would charge patients for fumigation with henbane but in the process of treatment would place small sections of lute string into the bowl of steaming liquid, claiming these were dead worms that had fallen from the mouth of the sufferer.²⁰ Despite this, belief in the existence of toothworm fell in and out of vogue throughout the early-modern period, and it was still the subject of medical speculation into the twentieth century.²¹ Much of the time, henbane was actually being used for its anaesthetic and sedative qualities, rather than as a method of fumigation.

Many medical texts of the early-modern period also differentiate between toothaches caused by excess heat and those by excess cold. Published in 1678, John Shirley's treatise *A Short Compendium of Surgery* contains a section on toothache in which he asserts that toothache 'proceeds from the influxion of a hot or cold humour'.²² He then explains that toothache provoked by a heat can be recognised by 'its sharpness and a great pulsation of the Tooth and Temples' whereas 'if the Cause be the fluxion of a cold humour', the patient will experience 'a heaviness of the Head and frequent spitting' (p. 124). The cures for the

¹⁸ 'camphor': OED entry 1, 'A whitish translucent crystalline volatile substance, belonging chemically to the vegetable oils, and having a bitter aromatic taste and a strong characteristic smell: it is used in pharmacy, and was formerly in repute as an antaphrodisiac.'

^{&#}x27;henbane': OED entry 1, 'The common name of the annual plant *Hyoscyamus niger*, a native of Europe and northern Asia, growing on waste ground, having dull yellow flowers streaked with purple, viscid stem and leaves, unpleasant smell, and narcotic and poisonous properties; also extended to the genus as a whole.'

¹⁹ Hoffman-Axhelm, *History of Dentistry*, p. 23.

²⁰ John Gerard, *The Herball or Generall Historie of Plantes* (London, 1633), p. 355.

²¹ Hoffman-Axthem, *History of Dentistry*, p. 401.

²² John Shirley, A Short Compendium of Chirurgery (London, 1678), p. 124.

toothache offered in Shirley's text, and in others of the period, are altered according to whether the toothache is believed to be provoked by hot or cold cause. The plants mentioned in these cures vary widely, but one of the most common ingredients for relief is vinegar, whether applied directly or with the advice that the plant be boiled in vinegar before administration. This relief was not without complications; in early-modern texts there is also a popular metaphor based on the acidic properties of vinegar when applied to the teeth. The phrase appears in the King James Bible in Proverbs 5:26: 'as vinegar to the teeth, and as smoke to the eyes, so is the sluggard to them that send him'. The implication is that vinegar is an irritant or damaging to the teeth, though it seems likely that during a time of anguish caused by toothache, the longer-lasting anaesthetic qualities of vinegar were likely to outweigh any concern about the pain of initial application. This metaphor tends to be used in sermons and other religious texts, and does not seem to have penetrated literary texts on a more general level.²³ As it appears frequently in household remedy books as being a useful pain-reliever, this begs the question of whether belief in the anaesthetising nature of vinegar was of more prevalence in general culture than its danger as an irritant. Whilst the Bible looms large over early-modern English society, arguably more so than medical writings, it is likely that an effective method of toothache relief would be passed by word-of-mouth and the need for relief would be greater than any concern about any short-term irritation, as the Bible describes.

Toothache in Love Poetry

The advantage of assimilating materials from both medical and literary texts in this analysis is that it helps give a fuller picture of what might have been important to people living in England in this period in terms of teeth, how they may have been advised to care for them, and also what they understood their teeth signified in relation to their general health. Thomas Carew's poem entitled 'The Tooth-ach Cured by a Kiss' is a short lyric in which the speaker tells 'physitians' (5) that he has found a more permanent cure for the tooth-ache than they or

²³ In Nicholas Lockyer's Baulme for Bleeding England, the writer asserts 'Speake to them of minding their Soules, an beating off their thoughts from this World, you are as Vinegar to their Teeth, and smoake to their Eyes'. See Nicholas Lockyer, Baulme for Bleeding England and Ireland, or, Seasonable Instructions for Persecuted Christians Delivered in Several Sermons (London, 1643), p. 405. Also, John Prideaux's collection, Certaine Sermons Preached by John Prideaux uses the same simile in listing 'That which vineger [sic] is to the teeth, smoake to the eyes, a carcasse-smell unto the nose, a naked dagger to the heart'. See John Prideaux, Certaine Sermons Preached by John Prideaux (Oxford, 1637), p. 46.

'chimists' (11) could manage.²⁴ The poem opens with the speaker expressing his gratitude for having the tooth-ache as without the pain, he would not have discovered the healing powers of Celia's kiss. In the third line he uses the phrase 'had not kind Rheume vext me then' to describe the toothache. 'Rheume' is described by the OED as being 'watery or mucous secretions [...] originally believed to originate in the brain or head and to be capable of causing disease'. While not a universally used explanation, one common theory about the cause of toothache was that it was caused by the falling of sharp or bad humours from the brain into the mouth. This is related to the second type of toothache identified by Charles Allen, as discussed previously. Sir Thomas Elyot refers, in a revised version of his early sixteenth-century medical text The Castell of Health, to toothache being 'caused of rheumes'.²⁵ Controversial late seventeenth-century medical practitioner John Archer states that those 'not troubled with the rheums' should not use tobacco because smoking 'attracts humours by heat' and 'the frequent Flux of rheumes from the Head to the Teeth [...] destroys the teeth'.²⁶ That this understanding had some resonance beyond the medical texts is indicated by a poem included in Rowland Watkyns's 1662 publication, Flamma Sine Fumo, or, Poems without Fictions which also refers to the toothache being caused by humours.²⁷ The opening lines of a poem entitled 'The Tooth-ach' read:

> Great store of humors from the head do fall Unto the gums; the pains are known to all.²⁸

Returning then, to the earlier Carew poem, having derided physicians by stating that their 'dull art' (8) can only 'patch up a body for a time' (9), Carew suggests that the cure rests in 'that Angell sure that us'd to move / The poole' who has 'to her [Celia's] lip, the seat of love, [...] retired' (13-14, 16). Carew cleverly presents his healer as figuratively playing host to the angel in John 5: 1-4, who was said to have troubled the water at the pool of Bethesda, meaning that whoever stepped into the pool next would be healed of any disease that he suffered with. The angel has 'retir'd' on Celia's lip which is how she is able to cure him with her kiss. Carew does not talk at length about the restorative powers of the kiss, but makes

²⁴ Thomas Carew, *Poems of Thomas Carew* (London, 1640), p. 202.

²⁵ Thomas Elyot, *The Castell of Health*, p. 123.

²⁶ Archer, John, Every Man his own Doctor (London, 1671), p. 94.

²⁷ The ODNB entry for Rowland Watkyns describes this publication as being split into three parts; this poem belongs to the section entitled 'A Looking Glasse for the Sicke, or, Signs of Several Diseases, with their Cures and Remedies.'

²⁸ Rowland Watkyns, *Flamma Sine Fumo* (London, 1662), p. 137.

such powers clear by reference to the angelic biblical healer. In doing so, he retains a playful distance from the idea he presents, that a kiss could cure a physical ailment, but still manages to convey a sense of romantic intent, albeit a rather generic one.

Playwright John Tatham published a collection of love poems in 1650 entitled Ostella, or the Faction of Love and Beauty Reconciled.²⁹ 'To Ostella upon the Pain of her Tooth'ach' is one of many poems in the publication which directly address the subject of the collection, Ostella. Like the Thomas Carew poem just discussed, aside from in its title, this poem also does not refer directly to the ailment, or even to the teeth, at all. The poet talks of a personified 'Love', presumably a representation of Cupid, who is looking for 'some secret part' (3) of Ostella to 'hit' with his 'dart'. Knowing that her 'Brest's of such Materials made, / no force could enter' (6-7), he turns to his mother, Venus, the goddess of love, for advice. Enraged, she 'curst' the 'burning torment' into Ostella. It is clear from the title of the poem that the sharpness of Love's dart is felt in her tooth, hence the toothache, but why this part is chosen to bear the pain is hinted at in the first stanza. As mentioned, Love is looking for 'some secret part' which might 'ad edge to his dart: / and make the Grief far greater than the Smart' (3-5). By inducing a pain as notoriously tormenting as toothache, Venus has ensured that Ostella will take notice of Love's dart. The speaker then reasons that by this method, Ostella might get a sense of his own pain caused by her leaving his love unrequited. Perhaps the poet felt that mentioning the tooth or the ailment by name in the body of the text would tip the abstract nature of the poem into being more outlandish. Instead, he points towards the ailment in the title and uses it within his argument as a universal signifier of great torment and suffering.

Toothache, in a literary sense, was associated with being part of the actual physical torment a lover must endure. Perhaps the most famous early-modern toothache is that of Benedick in Shakespeare's *Much Ado About Nothing*.³⁰ In act 3 scene 2, both Beatrice and Benedick have been convinced by their respective friends that each is in love with the other. The scene opens with Benedick's friends, Don Pedro, Claudio and Leonato poking fun at Benedick about his newfound serious state provoked by his falling in love with Beatrice. Initially, Benedick's only response to the teasing is 'I have the toothache' (III.ii.18). This then makes way for Don Pedro, Claudio and Leonato to revel in wordplay about the drawing of teeth, but it is likely the toothache reference carries greater significance as the note in the

²⁹ John Tatham, Ostella (London, 1650), p. 6.

³⁰ Stephen Greenblatt, et al (eds.), *The Norton Shakespeare* (London: W. W. Norton, 1997), pp. 1413-14.

Norton Shakespeare suggests: 'Toothaches supposedly plagued lovers'.³¹ In Samuel Wesley's bizarre collection of poems, *Maggots*, written on 'several subjects, never before handled', he supplies an annotation on his poem called 'The Tobacco Pipe' which underlines the fact that 'among other new Discoveries in Philosophy, this is universally now receiv'd – That Love is the cause of Tooth-ach'.³² That is not to suggest that this was a truth widely accepted by early-modern society at large, but that it was merely a commonly-known superstition which, when mentioned, would have a presumed familiarity to an audience of this era. In the opening scene of the final act of *Much Ado About Nothing*, Leanato is in a state of great anguish about the fallen reputation of his daughter, Hero. He starts to ruminate on why those who are not grieving wish so readily try to 'Patch grief with proverb' and 'make make misfortune drunk', especially when people who are suffering find it impossible to take comfort and seek advice. He argues that 'no man's virtue nor sufficiency / To be so moral when he shall endure / The like himself' (V.i.17-31). At the conclusion of this speech he implores his brother, Antonio, not to offer him comfort:

For there was never yet philosopher That could endure the toothache patiently, However they have writ the style of gods, And made a pish at chance and sufferance. (V.i.35-38)

Here, Leonato reflects on the hypocrisy involved in those who are able to concentrate on grand matters in the absence of suffering, when they themselves are the first to flounder if struck by misfortune. The toothache here represents a primitive form of human suffering which instantly reduces the god-like philosophers to fellow human beings. Toothache is, again, used to represent emotional turmoil.

Toothache as a Metaphor

Using toothache as a metaphor could also work in the reverse sense; rather than the toothache being a manifestation of emotional pain, the torturous experience of a toothache could be used as a powerful tool for convincing the reader of the seriousness of a wider political problem. A poem in Robert Heath's 1650 poetry collection, *Clarastella*, was helpfully

³¹ The Norton Shakespeare, p. 1414, fn. 1.

³² Samuel Wesley, *Maggots*, or, *Poems on Several Subjects, Never Before Handled by a Schollar* (London, 1685), p. 48.

entitled 'To one that was so impatient with the tooth-ach that he would not rest til all his teeth were drawn forth'.³³ In this poem, the speaker tries to persuade his addressee that he will regret having all of his teeth pulled out because he is suffering with 'an aking tooth' (25). The poem begins with a reversal of a common phrase, which dates back to the famous 'Root and Branch' petition of 1640. Heath says to his suffering addressee:

How! branch and root? that's too severe, Let penal laws suffice! Howe'er Do not extirpate the whole breed, Which one day you may so much need! (1-4)

By including this unmissable reference, Heath makes his political intentions clear. He writes about the teeth in an allegorical sense in order to warn the general public against abolishing episcopal power due to a corrupt minority, but disguises this caution as concerns about the practical implications of losing all of one's teeth as in lines 15-17 the poem asks 'But tell me when / Your teeth are gone, what wil you then / For grinders do?' Just before this direct address, the poet takes advantage of a biblical framework in order to justify why the toothache sufferer should not have all of his teeth pulled out. Clearly borrowing reasoning from Matthew 5:28-30, the poet states:

If your right hand offend, I know You may cut't off, your right eie tooth-ache If that offend, pluck out: but 'sooth, I find not so you may one tooth. (7-10)

Heath acknowledges that his statement in line 10 is complicated by the much repeated biblical phrase 'tooth for tooth', also found in Matthew 5:38. He concedes that 'tooth for tooth [...] should be repaid' (14-15) if 'in drink and heat / With pots and candlesticks y'have beat / Teeth out of this or that man's head' (11-14). In terms of the political metaphor, Heath implies that only those individuals holding episcopal power who have been proven to be immoral should be removed, and not the entire layer of hierarchy. This leads neatly to the next section of his argument. Having used political and religious reasoning, Heath then adopts a practical angle and asks how his addressee will manage once he has removed all of his teeth. He implies that in the loss of the teeth, a person is reduced to a bestial or infant-like state by

³³ Robert Heath, Clarastella (London, 1650), pp. 6-7.

asking if he will 'learn to chew / The cud, drink, and eat spoon-meat too? / Suck agen wil you not?' (17-19). The intention of having all of one's teeth drawn is then likened to a suicide wish as the inability to chew 'would make us sterve' (22). Not only is this true of the toothless, but if the episcopacy were to be removed, the government would be returned to an earlier state and would need to be reorganised in order to function. The overall message is that while it seems like a good short-term solution, it may have long-term negative effects on the political state of the nation.

The conclusion of the poem takes a surprising turn, which extends the metaphor even further. The poet seems to suggest that since his addressee is 'resolv'd to have all drane' (28), that he could at least save face by insisting that rather than allow the 'Barbar-surgion set / Them string'd on scarlet forth' he should 'let / Them in a box be kept, and shown / For those that fel from that jawbone / That Samson fought with' (29-34).³⁴ Furthermore the poet reassures that he will 'swear / That they the very Asses were' (33-4). 'String'd on scarlet forth' (30) refers to the practice of tooth-drawers wearing strings of pulled teeth in order to advertise their trade.³⁵ The allusion to Samson refers to Judges 15:15-17 where Samson 'found a new jawbone of an ass [...] and slew a thousand men therewith.' The purposeful emphasis given to the fact that the poet would swear the teeth belonged to the ass in the final line on the poem, suggests that the tone is designed to mock the sufferer; not that the teeth were claimed as part of Samson's victory, but that his addressee would make an 'ass' of himself by carrying all of his teeth in a box, instead of in his gums. This may lead the reader to question just how sympathetic Heath is towards the recipient of his poem, and it also implies Heath's attitude towards the heavy-handedness of those who proposed the abolition of episcopal power. Heath takes the opportunity to deliver a witty poem which works well as an extended metaphor by rooting it in an everyday problem which the reader should be able to relate to. It seems clear from other contemporaneous texts discussed in this chapter that toothache was indeed often considered a maddening and unbearable sort of pain, especially if the most ready remedy was to pull out the offending tooth. Indeed in this poem Heath refers to the sufferer being 'so far run mad with pain' (27). This also reflects the state of political turmoil which eventually brought about the Root and Branch petition. The toothache is,

³⁴ 'drane': OED entry 8 'To deprive (a person or thing) of possessions, properties, resources, strength, etc., by their gradual withdrawal'. The timeline for this entry suggests first printed usage was 1660, but this definition seems closest to the poet's meaning in this context.

³⁵British Dental Association, 'Barber Surgeons and Toothdrawers' http://www.bda.org/museum/the-story-of-dentistry/ancient-modern/barber-surgeons-and-toothdrawers.aspx> [accessed 2/5/2011]

however, indispensable to the poem's sense as no other body part would so neatly serve the arguments that Heath has created.

This is not the only poem in which Heath uses the teeth to deliver a more generalised metaphorical message to the reader. Later in the same collection and included in the collection of epigrams, Heath's poem entitled 'On an Inveighing Poetaster' targets those who criticise his verse. He refers to the 'toothless jeasts' (2) of the 'snarling scribler' (1).³⁶ 'Toothless' not only fits in with the general message of the epigram, but it also implies lack of power and edge. Heath says that 'toothach sure torments his head and wit; / Which makes him show his teeth that cannot bite' (3-4). The reason for the toothache is made apparent in the conclusion of the poem which cleverly compares the attempted attack of the critic's pen to that of a bee sting:

Bees when they wound, disarm themselves: this Ca[illeg.] So breaks his teeth when he doth biting snarle. (5-6)

The implication is that the critic finds himself in a vicious cycle of torment and toothless attack. Heath presents a stereotypical critic who fails to gain power by condemning the poesy of working poets. The suggestion is that the criticism levelled at Heath is not well-reasoned and supported, but an instinctive and aggressive response. Hence why the 'inveighed poetaster' is animalised by Heath and, despite his snarling, is reduced to a toothless state. The title also indicates that the critic himself may be a poet and Heath's advice suggests that he may be harming his own career by lashing out at the works of his fellow wordsmiths.

Written at a similar time, 'To a Gentlewoman that was extremely troubled with the Tooth-Ach', appears sympathetic to the suffering addressee. The poet, Thomas Washbourne, was a clergyman in the Church of England who wrote many devotional poems which were, at the persuasion of Lady Mary Vere, collated into *Divine Poems* and published in 1654.³⁷ His chosen method of comfort is to assure the 'Gentlewoman' mentioned in the title of his poem that while her pain is clearly acute, she should be consoled that compared 'to hell pains 'tis but a toy' (6).³⁸ At the opening of the poem, it is hard to ascertain whether the poet is suggesting that the 'Gentlewoman' is overreacting to her ailment, or whether he is genuinely in wonder at the extent of discomfort toothache brings. It states:

I Grieve and wonder so great pain

³⁶ Heath, *Clarastella*, p. 23.

³⁷ Elizabeth Allen, 'Washbourn, Thomas (1607/8-1687), *ODNB* [accessed 02/05/2011]

³⁸ Thomas Washbourne, *Divine Poems* (London, 1654), p. 93.

You should from one smal tooth sustaine, That you can neither eate nor drink, Nor all the night scarce sleep a wink[.] (1-4)

In his public role as a clergyman, it seems unlikely that Washbourne is actually mocking his addressee, but there does seem to be an air of Washbourne telling the Gentlewoman that she needs to get some sense of perspective on her toothache. He reminds her that her ailment will 'in a night or two' have passed, whereas the torment of hell 'doth infinitely last' (11-12). He suggests at the conclusion that she should 'Think then that this is all the hell / Which you shal feele, and you are a wel' (17-18). Another telling couplet asks the Gentlewoman 'If in one tooth such anguish lies, / What torments from that fire arise?' (9-10). This poem was surely occasioned by an actual toothache as opposed to toothache used in a literary sense, but the overall message is concerned with how people should deal with earthly pain by comparing it to what they imagine the 'damned suffer' in Hell (8). Even if the poet's words can be interpreted as being sceptical towards the extent of the woman's suffering, it still reiterates the point that toothache is recognised as an ailment with the capacity to seriously interfere with a individual's well-being.

A poem about dental pain whose clear aim is to delight in the literary possibilities of the toothache is Thomas Shipman's 'To Mr. T. S. The Tooth-ach cur'd'.³⁹ Apparently addressed to himself, the poem seeks to cheer the spirits of the sufferer by playfully suggesting that the pain of toothache may be eased by 'some Charms in rhyme' (20). The opening couplets of the poem address those afflicted with other types of pain. The man suffering with gout is 'blest' (1) because his disorder 'forces you to rest' (2). The female kind should remind themselves whilst in labour that childbirth is but a 'toy' as 'by your longing for't, it seems a joy' (3-4). Furthermore, 'At the Gallows, they would never sing' if hanging were 'so sad a thing' (6-7). Shipman continues in his humorous tone and asserts that it is surely the fact that elderly people have no teeth that 'sure makes our Grannams live so long' (8). Another group 'blest' (7) are the 'horned crew' as 'They've but one row of teeth'; this is presumably a reference to the fact that goats have front teeth only in their bottom jaw. Shipman extends this idea by stating that 'If *Cuckolds* had that priviledge by right, / I'd have a wife my self for 'twas night' (11-12). Demonstrating his literary knowledge, Shipman refers to 'Aelia', a character taken from Latin poet Martial's Epigrams. Translated and published in many editions, this collection of poems contains an epigram dedicated to 'Aelia'. This tells of

³⁹ Thomas Shipman, *Carolina* (London, 1683), pp. 10-11.

how Aelia began with 'four teeth', but lost her teeth two at a time through coughing and now 'she may Cough securely day and night / There's nothing left for the third Cough to doe'.⁴⁰ Suffering as he is with the toothache, Shipman now wishes for Aelia's fate which he once did 'flout' (13). He also makes reference to the idiom that 'Tooth-ach makes our Dogs run mad'. This phrase is often used when referring to toothache in a literary context; for example, in Reuben Bourne's play The Contented Cuckhold, or, The Woman's Advocate, Mr. Friendly tells Mr. Sparkish, one of the 'Gentlemen of the times', that in order to get rid of the 'dolorous Pain' of a headache, one must deal with the side effects of a cure. He then concedes that 'the Head-ach is as bad or worse than Teeth-ach, and that they say will make a Dog run mad'.⁴¹ Shipman's figurative solution, then, for relief from the dogged pain he suffers comes from 'old-Wives [...] in ancient time' (19); he advises that 'They cur'd the Tooth-ach with some Charms in rhyme' (20). Giving thanks to 'Divine Apollo' (21), Mr T. S.'s 'Pains now cease' and he proclaims Apollo to be not only 'God of Poets', but of 'Physitians too' (25). Needless to say, it is clear that 'To Mr. T. S. The Tooth-ach cur'd' was never intended to be of any practical use to the tooth-ache sufferer, except perhaps to cheer the spirits. However, it is useful, in an analytical and entertaining sense, as a piece of literature which is solely dedicated to playing on cultural associations with the ailment.

Toothache and Cuckoldry

The association made in Shipman's poem between toothache and the cuckold is not infrequent when toothache, or other forms of dental discomfort such as teething, is used in a literary context. More specifically, the metaphorical appearance of a cuckold's horns on his head is compared to the process of an infant cutting their teeth. In the opening scene of Edward Sharpham's 1607 play, *Cupid's Whirligig*, 'jealous knight' Sir Timothy Troublesome convinces himself to feign a warm welcome to young Lord Nonsuch despite his concerns that he may pose a threat to his relationship with his wife. He says to himself that Lord Nonsuch's arrival 'will breede ill' at his home and there he will 'breede my hornes as Children teeth, with sicknesse and with paine'.⁴² This simile works on several levels as it not only makes the visual statement of something hard and bone-like emerging from flesh, but it also intimates gnawing, ongoing pain which has obvious correlations with not only the metaphorical

⁴⁰ Martial, *Ex Otio Negotium*, ed. by R. Fletcher (London, 1656), p. 4.

⁴¹ Reuben Bourne, *The Content Cuckhold, Or, The Woman's Advocate* (London, 1692), p. 40.

⁴² Edward Sharpham, *Cupid's Whirligig* (London, 1607), sig. B2^v.

growing of the cuckold's horns but also the psychological trauma of jealousy and betrayal. It also directly relates the cuckold to an infant state, suggesting naivety and lack of control. The simile also appears in a 1661 play *The Rewards of Vertue*,⁴³ attributed to 'J. F.', and was kept in the reworking of the play by Thomas Shadwell, entitled The Royal Shepherdess and published in 1669.⁴⁴ The character named 'Geron' in both plays is a stock character, an old jealous knight married to a young wife described by Shadwell as a 'vain, foolish woman', called Phronesia. Similarly to Troublesome in Cupid's Whirligig, Geron is lamenting the torture caused by his suspected betrayal by his wife and asserts, 'Now do I perfectly perceive the pains that poor Children indure at the coming of their teeth, by the coming of my horns'.⁴⁵ In his version of the play, Shadwell retains Geron's monologue and keeps much of the phrasing verbatim, but he makes the speech much more concise. He removes much of Geron's concern about whether he can 'keep [his] head from forking' (due to the emergence of the metaphorical cock's comb), but still uses the image of Geron breeding horns from his head like a child cuts his teeth. Of course, it is impossible to know for certain why Shadwell made this editing decision but it does imply that the simile made good sense to an audience of this period and that the imagery involved gave a strong enough sense of what Geron was attempting to relate.

This association is also made in a less direct way in Thomas Dekker's comedy *Westward Ho*, published in 1607. Towards the close of the first act, the controversial wives of the lead characters, Tenterhook, Honysuckle, and Wafer are discussing their respective husbands, and the exchange focussed on Mr. Wafer alludes to an early-modern superstition about toothache. Referring to her devoted husband, Mrs. Tenterhook tells Wafer that she 'heare say he breeds thy childe in his teeth everie year' (I.2.107-8).⁴⁶ Cyrus Hoy points out that this notion can also be found in Middleton's *The Widow*, where Brandino explains that his clerk and close colleague, Martino, is suffering with toothache in sympathy for his sore eyes. Brandino elaborates on this stating that:

There beats not a more mutual pulse of passion In a kind husband when his wife breeds child Then in Martino; I ha' mark'd it ever; He breeds all my pains in's teeth still (IV.i.72-75)⁴⁷

⁴³ J.F., Gent, *The Rewards of Vertue* (London, 1661).

⁴⁴ Thomas Shadwell, *The Royal Shepherdess* (London, 1669).

⁴⁵ Gent, *The Rewards of Vertue*, p. 14.

⁴⁶ Thomas Dekker, Westward Ho (Cambridge: Cambridge University Press, 1955), p. 329.

⁴⁷ Middleton, Thomas, *The Works of Thomas Middleton: Volume the Fifth* (New York: AMS Press, 1964), p. 191.

Hoy also highlights, tellingly, that a similar reference occurs in Middleton's Women Beware *Women*, when in Act 3 Isabella talks to the Ward about their loveless forthcoming nuptials. Following his inspection of her physical condition, the Ward promises never to 'part with thee, sweetheart' before giving her 'sixteen children, and all boys'.⁴⁸ Isabella responds: 'You'll be at simple pains, if you prove kind, and breed 'em all in your teeth'. As expected in comedies of this era, there are questions of infidelity surrounding both the marriages of the Wafers, and Isabella and the Ward; Mrs Wafer is involved in setting up a trick involving the gallants that are pursuing the wives, and Isabella is marrying the Ward to cover up her incestuous affair with her uncle, Hippolito. It is tempting to infer that there is also a connection between the sympathetic toothache and the pregnancy being illegitimate, even though the evidence is somewhat limited. This is supported by Gordon William's reading of the phrase quoted in Westward Ho as he explains 'breeds thy childe in his teeth everie year' means 'is reproached annually for fathering another's child'.⁴⁹ Perhaps the intention of both Middleton and Dekker in all three of these plays was to use toothache not only as an example of the worst kind of pain a man might suffer (just as childbirth may be considered worst for a woman), but also to imply the torturous and inescapable anguish of jealousy and betrayal.

Conclusion of Chapter Two

This chapter sought to establish what treatments were available to the early-modern sufferer of toothache. In outlining the murky boundaries of who was performing different kinds of medical procedures, it is clear that though the law dictated that tooth-pulling and cleaning responsibilities lay in the hands of the barber-surgeons, there was a culture whereby if someone needed help, someone with the expertise to bring relief was unlikely to turn away business in the form of a client in need. Certainly medical writers who were not professed barber-surgeons were publishing material relating to the treatment of the teeth and, similarly, in a literary context, characters who required dental treatment often called for a surgeon, rather than a barber. Predating dentistry as a formalised profession, people in this period relied heavily on their own knowledge and experience to take steps to relieve their own pain. Medical writers fed this need by the inclusion of numerous remedies that could be made with ingredients that were easily accessed. Toothache was often portrayed as the worst kind of

⁴⁸ Cyrus Hoy, Introductions, Notes and Commentaries, p. 177.

⁴⁹ Dictionary of Sexual Language (London: Athlone Press, 1994) p. 234.

pain a person could suffer, but the removal of teeth left individuals vulnerable to infection or, in the removal of particularly long or stubborn teeth, even fractures of the jaw. On top of this, just as discoloured or missing teeth could be seen to be a sign of disordered health, one of the causes of toothache was understood to be the presence of corrupt humours in the mouth. A modern audience can often relate to the torturous experience of a severe toothache, but in an early-modern context with the prospect of the certainly painful, but also potentially dangerous, extraction of teeth without reliable anaesthetic must have rendered toothache a frightening experience.

Most of the proposed causes of toothache had little to do with the teeth themselves. Though there was clearly an awareness of the degeneration of the teeth being related to rotting of the teeth and many sources advise individuals to clean their teeth daily, most medical sources are keen to attribute the cause of toothache to a humoral problem. As most bodily dysfunctions were explained in this way, this is not surprising, but it does mean the onset of toothache is likely to generate greater anxiety than it would today. The notion of the toothache being caused by worms in the root of the teeth had been discredited by the seventeenth-century, but that is not to assert that it had completely left public belief by this stage. Its relative absence in a literary context suggests that it had diminished in popularity, but there were enough remedies relating to the occurrence of toothworm in late sixteenthcentury medical works to imply that it was still in circulation as an idea. Where there was a medical conundrum, there was often someone, a mountebank or travelling salesperson, willing to take advantage of public fears, as in the story, told in this chapter of the mountebank fumigating mouths into a bowl with sections of lute string, timely thrown in to act as worms fallen from the head of the sufferer. While such stories exist, it cannot be under any doubt that those practising dental treatment were invaluable to those suffering with toothache. An aptitude for pulling teeth in a way which minimised the duration and intensity of pain to the sufferer could only be developed through experience, and therefore those who could offer such service were the best option available to the patient.

Poets and playwrights often used toothache as a metaphor in their works. It could be used to represent a range of emotional situations including the fervour of love and the anguish of betrayal, to political turmoil and religious penance. Not only was the toothache useful in its intensity and infamous torment, but its situation in the head makes it a highly personal, invasive and inescapable sort of woe, just like the emotional disturbance it was being used to symbolize. Toothache was not used for comedic effect, as much as visibly ill teeth were. As demonstrated in this chapter, poets in the early-modern period used toothache for a surprisingly varied range of effects. Thomas Carew, drawing inspiration from the bible, sets toothache apart as the sort of pain that physicians are foxed by and can only offer temporary relief. This therefore empowers the metaphor that he creates of the female subject, Celia, with powers likened to those of Bethesda, being able to relieve his toothache with a kiss. But more than this, through using the toothache, her touch brings an end to his infinite suffering and soothes him, a clear parallel with the poetic resolution of unrequited love. John Tatham also recognises the connection between toothache and unrequited love but he uses it in an altogether more explicitly self-centred way. In contract to Carew's poem, Tatham uses the tooth as an identified weak spot in his beloved, who is portrayed as detached and remote, which can be penetrated with cupid's dart. This could be forgiven if he then did not progress to wishing the toothache on the target of his affections as means of making her understand his painful torment of unrequited love. This is arguably not the most romantic of metaphors but it seems clear that Tatham was aware that the poem treads the boundaries of clumsy metaphor as he makes no mention of the teeth themselves in the poem, only in the title. The metaphor is clever as the theme of toothache would be easy to relate to for most readers, just as it would in today's audience, but it also makes use of the way the teeth were viewed as vulnerable. The way he describes the tooth as a hidden recess where cupid's arrow can be contained suggests the tooth is an intimate part of the woman's body but also that is it capable of being penetrated to powerful physical effect.

Robert Heath's interest in toothache does not approach the theme of love, but politics and literary criticism. He makes use of the physical space and function of the teeth and the mouth to present a powerful metaphor for the proposed abolition of Episcopal power. It is also interesting to note that Heath specifies in his poetry that should dental treatment be required, it is a barber-surgeon who would be summoned. Heath makes similar use of the teeth in another of his poems which attacks an insensible critic. The image he presents of the 'Inveighing Poetaster' is emasculated both in his toothlessness and the fact that he attacks with his teeth in the first place which was seen culturally as 'unmanly'.⁵⁰ Clergyman Thomas Washbourne uses the toothache in a comparable way to Heath in that he wants to point out to his reader than in times of turmoil, it is important to keep things in perspective. Just as Heath does not want his reader to have all of his teeth pulled due to pain in one, reflecting that all episcopal power should not be abolished due to the corrupt few, Washbourne wants the

⁵⁰ Heath, *Clarastella*, p. 23

Garthine Walker, *Crime, Gender and Social Order in Early Modern England* (Cambridge: Cambridge University Press, 2008), p. 27.

female subject of his verse not to become consumed with the pain of her toothache as it is negligible pain in relation to the torments of Hell. Both poets reason that the toothache is not the worst possible scenario, but it is how the patient deals with their smarting that will determine the length and severity of their suffering.

Thomas Shipman's poem again uses the toothache as a painful foundation in order to increase the powerful status of the supposed cure, verse. Shipman makes a creative case for the healing effects of poetic language claiming, with poetic license, that he himself was cured of his toothache by penning verse. This stands in opposition to the way in which Shakespeare used toothache in *Much Ado About Nothing* as in this play, Leonato argues fervently against the usefulness of comforting language in the face of great anguish and states famously that 'there was never yet philosopher / That could endure the toothache patiently' (V.i.35-38).⁵¹ Though dental pain was widely acknowledged as severe and often unbearable to the sufferer, in literary material there is an implied sense of responsibility for the sufferer to keep their grief in perspective. This could be due to the commonplace nature of dental problems, and indeed other physical discomforts, which were not easily resolved, so a certain amount of resilience was required.

Dental problems provided writers with an accessible extended metaphor which most audience members or readers would be able to relate to. This is also useful for the modern dental historian, as it is possible to gain access to ideas presented with the assumption of cultural familiarity in relation to the teeth and dental care. Medical texts interested in the teeth tend to rely upon practical experience or theorising about the impact of dysfunction in the humoral system on the health of the teeth. The absence of major official legislative change over dental workers during the early-modern period does imply that lack of provision was not seen as a significant societal problem. Indeed, tooth-drawers are widely referred to, suggesting that their services were fairly accessible to the general public. While the characterisation of tooth-drawers suggests that they were perceived as shady, and unskilled, it is also clear that their aid was invaluable to the sufferer and they are frequently summoned in various literary works. Toothache provided the early-modern sufferer with a dilemma; not only did contemporaneous medical texts suggest that toothache could be a sign of more generally disordered health, but there is also the question of whether to pull the tooth. With poor provision of dental restoration and false teeth, sufferers must have been keen to retain their teeth for as long as possible. At the same time, they had the added pressure of believing

⁵¹ William Shakespeare, *The Norton Shakespeare: Based on the Oxford Edition* (London: W. W. Norton, 1997).

that one corrupt tooth could infect the rest of the teeth in their mouth. It seems little wonder that the toothache was once referred to as 'that fierce Friend of Hell / Which in a *hollow tooth* doth love to dwell'.⁵²

⁵² Raphael Thorius, *Hymnus Tabaci: A Poem in Honour of Tabaco* (London, 1651), p. 46.

<u>Chapter Three</u> <u>'To Please Her Snuffling Palate': The Problematic Palate</u>

To fully appreciate the ramifications of having a palate damaged by ill-health, it is necessary to explore two key areas. Firstly, it is important to consider the way in which treatment of the damaged palate is presented medical material and secondly, it is necessary to investigate the way those with the roof of their mouth incomplete are presented in literary texts. This chapter aims to outline some of the major health concerns which may present such damage, and highlight why, in the early-modern period, such impairment may carry great social implications. There is a sense in which the palate of the early-modern individual was much more vulnerable than that of a person living today. Diseases such as scurvy and syphilis which often result in the flesh of the palate being eaten away were more prevalent, and were often given treatment which made the symptoms worse. For example, the use of mercury to treat syphilis often caused the gums to recede, and the teeth to loosen, meaning that the degeneration of the flesh in the mouth would often be worsened by its excessive use.¹ As demonstrated in this chapter, literary writers exploited the connection between disease and impaired speech which helps reinforce the notion that it was a widely-recognised association. That is not to assert that every individual with a palate-related speech impediment was judged in this manner, but to acknowledge that the connection was culturally familiar. In contrast to Chapter Four which focuses on the congenitally problematic palate, this chapter examines the concerns surrounding, and recommended treatment of, the once-healthy palate of adults in early-modern England.

The palate, or roof of the mouth, is often overlooked as an essential body part but its healthy condition is vital for a good standard of living. It makes eating and drinking possible, enables speech and, within the terms of the early-modern humoral hydraulic bodily system, it provided a vital service to the body in the balancing of humours. Within the flowing system of humours, the palate occupied two distinct roles. Firstly, it was thought to protect the mouth and the body from ill humours falling from the brain which is why, if the palate was unhealthy or incomplete, further health complications were often thought to ensue. Secondly, the design of the palate facilitates the successful purging of humours from the brain and out of the mouth. In his medical compendium, *Mikrokosmosphia* (1615), Helkiah Crooke describes how the palate is 'divided in the middest by a Suture, in end whereof are two holes

¹ Claude Quetel, *History of Syphilis* (Cambridge: Polity Press, 1992), p. 31.

through which the braine is purged into the mouth'.² The condition of the palate is vulnerable, not only to diseases that originate in the mouth, but also to diseases which manifest their symptoms orally, such as scurvy. Venereal diseases, especially syphilis, are most famously associated with causing a breakdown of mucous membranes in the mouth and the bones at the centre of the face, the maxillofacial bones.

Over the early-modern period, various remedies were proposed that were designed provoke the purging of phlegm from the brain into the mouth, via the palate, and these were collectively referred to as being apophlegmatisms.³ The first chapter of Francis Bacon's miscellany, *Sylva Sylvarum* (1627), contained ruminations on the subject of purging mentioning the branch of medicine which relies on the 'Force of Attraction', which includes 'Apophlegmantismes and Gargarismes, that draw the Rheume downe by the Pallate'.⁴ Sixteenth-century surgeon Philip Barrough explains this practise further:

Apophlegmatismus is a medicine which causeth one to vomit up fleume: it provoketh reume out of the braine into the mouthe, and it is good to purge the braine. Masticke⁵ is commonly used in this case, which being longe holden in the mouthe and chewed, it bringeth foorth reume and fleume. Also Sage leaves holden in the mouth doeth likewise purge reume by the mouth. Also make *Noduli* of Pellitore, pepper, souisacre, roote of Ireos, and *Panax*, and hold them in the mouthe.⁶

The role of the palate is essential in this procedure as not only does its structure lend itself to the flow of humours or rheumes from the brain, but it can also be coated in the apophlegmatic substance to directly draw fluid into the mouth. Barrough recommends that an ointment can be made using the ingredients listed above 'wherewith the roufe of the mouthe must be announted, for they by reason of their heate and tartenesse, do draw fleume and rhyme into the mouthe'.⁷ In early-modern medical thought, the presence of mucus in the nose, throat and chest was due to excess fluid from the brain and, as is true of current medical advice, the best way to expunge the problem was to clear the fluid by coughing. The various mixtures applied to the palate, held in the most direct passage for this is through the mouth, via the palate back of the palate. This means, therefore, that describing the purging of fluid via the palate

² Helkiah Crooke, *Mikrokosmographia: A Description of the Body of Man* (London, 1615), p. 623.

³ 'apophlegmatism' OED entry 1a: The action of purging phlegm from the head.

⁴ Francis Bacon, Sylva Sylvarum (London, 1627), p. 13.

⁵ 'mastic' OED entry 1a.: An aromatic gum or resin which exudes from the bark of the lentisk or mastic tree [...] used chiefly in marking varnishes and, formerly, in medicine.

⁶ Philip Barrough, *The Method of Physicke* (London, 1583), p. 302.

⁷ Barrough, *The Methode of Phisicke*, p. 302.

was merely a way of describing literally the process of voiding mucus from the nose and back of the throat by clearing it through the mouth. The role of the palate was vital as it was understood, not only to facilitate the purge, but also to regulate the flow of fluid which was vital to good health in humoral understanding. Under the humoral system, a body was only thought to be healthy if all its humours were in perfect proportion. It, therefore, makes sense that other health disorders would be understood as an overflow of fluid to the other orifices of the head, and sometimes the body, because there was simply too much to flow downwards through the palate itself. This is clarified by physician Walter Bruele, who, in his treatise of diseases, Praxis Medicinae (1632), explores the many causes of catarrh or rheume.⁸ He explains that excess fluid from the brain are 'soonest purged by the pallate'. However, 'when they flow too much [...] are they avoyded partly at the nose, partly at the palate, some at the eares, some at the eyes'.⁹ More worringly, he details a number of health complications caused by the other parts of the body these humours could descend into including those that 'fall into the inwards parts of the body, as stomacke and lungs, whereof come these diseases, viz. [such as] an impostume of the lungs, and Asthma'.¹⁰ While the palate is, in a sense, an inanimate part of this process, it provides a vital barrier between the potentially noxious fluid being produced by the brain during such an illness, and the rest of the body. It stands to reason that the individual with a damaged or incomplete palate would be understood to be more vulnerable, not only to diseases transmitted by external cause, but also those which can travel throughout the body from their initial problem site.

Speech, The Palate and Venereal Disease

Early-modern society understood the need for the palate to be intact, not only to facilitate the sense of taste but also for the individual to have the ability to produce clear speech. There are examples of writers from many different professions, from physicians to philosophers, writing in detail about the role of the palate as an instrument of speech. In *Gerochomia Vasilike King Solomons Portraiture of Old Age* (1665), John Smith, of the College of Physicians, provides a detailed anatomy of the body based around the verses of the twelfth chapter of Ecclesiastes.¹¹ Chapter four of Ecclesiastes verse 12 supplies the title to Smith's

⁸ 'rheum' OED entry 1a.: Watery of mucous secretions, esp. as collecting in or dripping from the eyes, nose, or mouth, originally believed to originate in the brain or head and to be capable of causing disease.

⁹ Gualtherus Bruele, *Praxis Medicinae* (London, 1632), pp. 151-2.

¹⁰ Bruele, *Praxis Medicinae*, p. 152.

¹¹ John Smith, Gerochomia Vasilike King Solomons Portraiture of Old Age (London, 1665)

section focussed on the human production of sound, 'All the Daughters of Musick shall be brought low'.¹² The palate is listed as the third instrument of the voice amongst the lungs, tongue, teeth, and the lips. According to Smith, the palate is key to the production of speech for a number of reasons. Firstly, Smith recognises that 'some particular Letters and words are formed more immediatly against this part' but adds that 'it doth also give strength & clearness to the whole voice' (p. 138). This process is aided by the 'tenuous bone' which forms the arch of the palate which is 'covered over with a nervous skin, corrugated with several asperities, for the better retaining and rebounding the air in the voice'.¹³ Scientific accuracy aside, Smith demonstrates a real attentiveness to the physical qualities of the palate which help refine the production of sound. He encourages his reader to share in his appreciation of the logical composition of this part by directly comparing it to 'all our places dedicated to divine service' which he highlights 'are made of the same concamerated form on the top of them, (questionless in imitation hereof)' (p. 139). Smith also makes reference to the difficulties faced by those who suffer palate damage, but also takes this opportunity to pour scorn on those whose palates have been ravaged by venereal disease. Returning to his biblical framework, Smith invites his readers to 'say to any Son of Venus, who hath followed her destructive entirements to this imperfection, Thou also art one of them, thy speech bewrayeth thee' (p. 139). The closing quotation in this extract is taken from Matthew 26:73 when Peter has twice denied being a follower of Jesus. His interrogator points out that Peter's accent gives away that he has come from Galilee which supports their claim of recognising him as being one of Jesus's disciples. The implication here is that Smith invites judgement of those with speech impediments brought about by damage to the roof of the mouth. The writer does specify that such criticism should be reserved for those known to have chosen a licentious lifestyle. However, it seems likely that such judgement could been cast on those who had a similar defect, but by another cause such as the congenital cleft palate, as will be explored in Chapter Four.

Such prejudice may have been propagated by medical texts which, when detailing the structure and function of the palate, limited their explanation for the faulty palate to being a consequence of venereal disease. French anatomist Jean Riolan's text, *A Sure Guide, or, The Best and Nearest Way to Physick and Chyrurgery* (1657) promises 'an anatomical description of the whol body of man and its parts'.¹⁴ In this guide, the tenth chapter is 'Of the Palate' and

¹² Smith, *Gerochomia*, p. 133.

¹³ 'tenuous' OED entry 1: Thin or slender in form; of small transverse measure or calibre.

¹⁴ Jean Riolan, A Sure Guide, or, The Best and Nearest Way to Physick and Chyrurgery (London, 1657), p. 1.

gives a similar description of the 'Nervous Skin' and 'Crevesses' of the palate as John Smith, discussed earlier, but without the religious comparison. He does, however, state that 'This most tender bone does many times become rotten in the Whores-Pocks, the Palate being boared through (if care be not taken in time)'.¹⁵ According to Riolan, the main difficulties caused by the damaged palate are that it 'does much hinder the Patient in chewing of Meat and in speaking' (p. 204). This is not to suggest that Riolan invited judgement of those with a speech impediment caused by an incomplete palate, but that in his experience this was the most common cause, as far as he was aware.

Gideon Harvey published many controversial medical treatises and makes his approach to venereal disease clear in *Little Venus Unmask'd, or, A Perfect Discovery of the French Pox* (1670). Article 16 in this text is concerned with 'The Symptomatick Cure'; that is to say remedies that deal with the effects of the disease, in this case 'urgent Pocky symptoms', rather than the route cause of the illness.¹⁶ Harvey, a great believer in the value of experience, makes the observation that damage to the nose and palate was often worsened by the use of mercury.¹⁷ He argues that rather than generating excessive saliva in an attempt to detoxify the body of its disease, mercury actually acts to 'convey all the malignity of the body to the Palat and Nose, where in very few dayes it devours both'.¹⁸ He states that, due to the popularity of 'Mercurial Salivations', he had never seen 'in any Country so many level'd Noses, and devoured Palats, as here in England' (p. 110). He advises that, rather than encouraging the patient to salivate with the use of mercury, that the physician should endeavour to 'expel the venom downwards, or through the Pores'. If the physician fails to do so resulting in the nose being flattened and the palate devoured, he 'certainly [...] will for ever disgrace your patient' (p. 110).

The Damaged Palate in Literature

Within the cultural context of early-modern England, the damaged palate could be used in a literary sense as an easy marker for a person of disrepute. Not necessarily a powerful enough emblem in itself to mark venereal disease but certainly where other physical signs of the pox were present, the dysfunctional palate was used to serve as further evidence that an individual was suffering from a sexually transmitted disease. In the opening scene of Thomas

¹⁵ Riolan, A Sure Guide, p. 204.

¹⁶ Gideon Harvey, Little Venus Unmask'd, Or, A Perfect Discovery of the French Pox (London, 1670), p. 109.

¹⁷ 'Gideon Harvey 1636/7 – 1702)', Patrick Wallis, ODNB.

¹⁸ Harvey, *Little Venus Unmask'd*, p. 110.

Shadwell's play The Humorists, notorious womaniser, Crazy, is protesting to Raymund that he has been cured and is now free from the venereal disease that has plagued him recently. In his frustration, Raymund argues that Crazy is so riddled with the pox that his nose and palate are at risk from being eaten by the disease. He taunts Crazy, stating that he would 'not give Six Moneths purchase for an Estate during the term of thy Natural Nose!¹⁹ Further, he says he 'shall live to see thee snuffle worse than a Scotch-Bag-Pipe that has got a flaw in the Bellows' (p. 4). 'Snuffle', meaning 'To speak through the nose', is often used in literature of this period to refer to those whose palates have been rotted away by venereal disease. In the case of Raymund and Crazy it powerfully implies a sense of decline and disintegration. As Crazy attempts to belittle Raymund by implying that he drinks heavily and this could cause equal damage to his health, Raymund returns to his argument without hesitation, asserting that 'Women [...] bring you sore Eyes, weaken'd Hamms, Sciaticas, falling noses and Rheums' (p. 4). Fallen nose could refer to the potential collapse of the septum which is often symptomatic of venereal disease, particularly syphilis, but it could also be a corruption of the phrase 'fallen palate' which was often used to refer to the palate that was either swollen or hanging down loosely due to damage to the flesh.

The phrase 'snuffling' was used to imply a person who speaks down their nose due to a gap in the soft palate. This happens because the edge of the soft palate, or 'velum' stretches across the throat to block off the nasal passage when we speak; in people who have this part of the palate missing, or damaged, the nasal passage is not blocked and the person cannot articulate well because air escapes through the nose. The association between 'snuffling' and venereal disease is highlighted in *The Witch of Edmonton* by William Rowley, Thomas Dekker, and John Ford. In the first scene of Act 4, Old Banks enters the scene with 'two or three Country-men' who have all seemingly convinced each other that Mother Sawyer, an older single woman living locally, is responsible for their misfortune as she is a witch.²⁰ One of the countrymen offers a way of proving that Mother Sawyer is a witch: 'A handful of Thatch pluck'd off a Hovel of hers: and they say, when 'tis burning, if she be a Witch, she'll come running in'.²¹ Mother Sawyer promptly enters, understandably upset by the vandalism to her home. Old Banks, satisfied that the theory has been proven, makes himself look foolish by asserting the 'trick as surely proves her a Witch, as the Pox in a snuffling nose, is a sign a Man is a Whore-master' (p. 39). Old Banks is portrayed as an irrational man, and sympathy is

¹⁹ Thomas Shadwell, *The Humorists; A Comedy* (London, 1671), p. 4.

²⁰ William Rowley et al., *The Witch of Edmonton: A Known True Story* (London, 1658), pp. 38-9.

²¹ Rowley, *The Witch of Edmonton*, p. 39.

invited towards the victimised Mother Sawyer; while the audience is not invited to see logic in the actions of Old Banks, the notion of the snuffling Whore-master would still need to be familiar for the conceit to work.

Edward Ward also makes use of this association in his satirical text The Rambling Rakes: Or, the London Libertines (1700) which, as suggested by the title, details the fictional adventures of a rake, giving details of the various characters he encounters on his ramble through various establishments around town. In this short tale, the protagonist is drunk and walking the streets looking for a woman to spend the night with. He stumbles across 'a strolling Strumpet, whose Face by Candle-Light (which commonly gives Advantage to the Female Sex) look'd plaister'd over with Pomatum, and her Lips imbellish'd with Counterfeit Colour to imitate a Healthful Redness'.²² She takes him to a house guarded by a 'burly black Fellow', with a 'Hostess' who supplied further 'belov'd Liquor' to his mistress.²³ In case the reader has not picked up on clues thus far, Ward makes it even clearer that the woman he is trying to bed is riddled with venereal disease; in asserting his willingness to satisfy his mistress in whatsoever way she pleases, he writes 'I, being a very liberal Gentleman, very readily consented to, or indeed anything else, my Insinuating She-compound of Devilism was desirous to please her snuffling Pallat with' (p. 13). The conclusion of this episode is that, on falling asleep, the protagonist is put into bed with the corpse of a woman who 'Dyed in her Calling, and between the Distemper and Medicine, Pox and Mercury, was carry'd the Lord knows whither, to give an Account of her Stewardship' (p. 13). As he wakes, a man enters the room and claims that he has stolen goods from his premises and levels the accusation that he murdered the woman next to him. The man demands a year's rental arrears or threatens the rake with facing the Lord Chief Justice. The conclusion of the text is a quatrain of verse which ambiguously, rather than pointing out the advantages of avoiding a debauched lifestyle altogether, advises the reader to 'take Care of Jilts, for here you see, / Living or Dead, they have been Plagues to me' (p. 15). Those at risk of or suffering from venereal disease were often portrayed as continually gambling with their own health. For instance, in Act four scene two of John Webster's The Duchess of Malfi, one of the madmen sent to taunt the Duchess in her state of imprisonment makes reference to a stock character who is 'a snuffling knave, that while he shewes the Tombes, will have his hand in a wenches placket'.²⁴

²² Edward Ward, *The Rambling Rakes* (London, 1700), p. 12.

²³ Ward, *The Rambling Rakes*, pp. 12–13.

²⁴ John Webster, *The Tragedy of the Dutchesse of Malfy* (London, 1623), sig. K^v.

Helping Those with a Palate that is Incomplete

The word 'snuffling' was also used in the 1634 translation of French surgeon Ambroise Paré's The Workes of That Famous Chirurgion Ambrose Parey which was translated from Latin into English by Thomas Johnson. The twenty third book in Paré's text details 'The Meanes and Manner to Repaire or Supply the Naturall or Accidentall Defects or Wants in mans body'.²⁵ Chapter four is concerned with 'filling the hollownesse of the Pallat' and gives two reasons why part of the palate may have been lost: 'being broken with the shot of a gun, or corroded by the virulency of the Lues venerea' (p. 873). He confirms the ideas expressed in the literary examples above that, those with a damaged palate, 'cannot produce their words distinctly, but obscurely and snuffling' (p. 873). He then gives a description of an obturator designed to fit into the hole or gap in the palate which is similar to those described later in this chapter with a sliver of silver being attached to a small sponge which could be inserted into the gap in the palate. According to Joshua O. Leibowitz, this description is very similar to an earlier one given by physician Amatus Lusitanus.²⁶ References to palatal obturators are not common in this period, but they are frequent enough to suggest that people took practical steps to fashion them from a range of malleable materials. Given that communication and eating is very difficult with part of the palate missing, physicians, barber surgeons and other individuals professing to be of medical service made suggestions of various materials to use as a way of securely plugging the gap in the roof of the mouth. Jean Riolan, just discussed, who practised in the first half of the seventeenth century, wrote briefly that the palatal hole could make eating and speaking difficult, 'unless it be stopped with a plate, Cotton, or Spunge'.²⁷ Paré's description provides sufficient detail and practical advice to enable an individual to create their own obturator:

I have thought it a thing worthy the labour to shew the meanes how it [the hole in the palate] may be helped by art. It must be done by filling the cavity of the pallat with a plate of gold or silver a little bigger than the cavity its selfe is. But it must bee as thick as a French Crowne, and made like into a dish in figure, and on the upper side, which shall be towards the braine, a little spunge must bee fastened,

^{&#}x27;placket' OED entry 2. An opening or slit in a garment which enables the weare to put it on or which gives access to a pocket; spec. (now hist.) an opening in a woman's skirt or underskirt, esp. as offering a man the opportunity for sexual activity; (hence, in extended use) the vagina.

²⁵ Ambroise Paré, *The Workes of that Famous Chirurgion Ambrose Parey* (London, 1634), p. 869.

²⁶ Joshua O. Leibowitz, 'Amatus Lusitanus and the Obturator in Cleft Palates', Journal of the History of Medicine and Allied Sciences, 4 (1958), p. 496.

²⁷ Jean Riolan, A Sure Guide, p. 204.

which, when it is moistened with the moisture distilling from the brain, will become more swolne and puffed up, so that it will fill the concavity of the pallat, that the artificial pallat cannot fall down, but stand fast and firme, as if it stood of it selfe. (p.283)

He gives testament to successful use of such a device by concluding with the declaration that their 'certain use I have observed not by once or twice, but by manifold triall in the battles fought in the Alpes' (p. 873).

M. de la Vauguion reiterated this design in 1699 and gives some indication of how firmly the obturator would be fixed in place in the roof of the mouth. He describes how 'the Moisture of the Mouth swells this spunge and fastens the Plate so close to the Palate, that it is very difficult to draw it out'.²⁸ Initially, he describes the palatal plate in a section that deals with 'supplying Parts deficient' (p. 354), but returns to the matter again when describing treatments for 'Fractures of the Nose' (p. 375). His justification for including treatment of the palate in this section is that the bones at the 'lower and inmost part of the Nose' are 'made of a Portion of the Bones of the Upper Jaw, and those of the Palate' (p. 376). La Vauguion attributes palate damage to the bones of the palate being very thin and 'for that Reason very apt to cariate [decay] in the Venereal Distemper, which if it happens, makes the party snuffle or speak in the Nose' (p. 376). This text also provides one of the earliest instances where the plate is referred to as an 'Obturator' as he tells the reader, 'This plate may be called the Obturator of the Palate' (p. 376). This instance of the word 'obturator' is in 1699, one hundred and twenty years earlier than the earliest given instance in the Oxford English Dictionary. In a much earlier text, Jacques Guillemeau provides further instruction relating to the production of the plate. In The French Chirurgerye, Or All the Manual Operations of Chirurgerye, Guillemeau provides illustrations of various instruments for oral treatment, including a small picture of an obturator. The illustration is described as 'an artificial goulden roofe of the mouthe, which is a goulde plate, as thinn, as a frenche crowne'.²⁹ Interestingly, he then explains that some individuals are not able to find a plate to fit their particular defect 'by reason that the gould smithe can not so conveniently make the same, that it aequally of all sides does touch the Pallate of the Mouth'. In this case, he describes how 'in steade therof they use, a tente of made of linte, or of Sponge'. This had the great advantage of being more readily available and inexpensive to supply and therefore 'if one fell out, they incontinentlye have an other in a readiness, & preparatione to put therin, because otherwise they should

²⁸ La Vauguion, A Compleat Body of Chirurgical Operations (London, 1707), p. 354.

²⁹ Jacques Guillemeau, The French Chirurgerye, Or, All the Manualle Operations of Chirurgerye (London, 1598)

speak throughe the Nose'. This reinforces the idea that the individual who may not have the financial means to seek medical treatment could take the pragmatic approach of forming their own obturator to stop the hole and restore their clarity of speech.

The Fallen Palate

Another condition which warrants attentions in a number of early-modern medical works is the 'fallen palate'. It is often ambiguous whether this term refers to a swelling of the soft palate or of the uvula due to the proximity of the two parts but in either case, it is clear that it caused the sufferer great discomfort, and there is evident determination to offer a cure, or at way of easing the pain caused. It is not only the pain of inflammation that causes problems, but also that it prevents the uvula performing what was understood to be its role. Paré offers an explanation for why the uvula might become enlarged [i.e. a 'fallen palate'] and the explanation relies upon the situation and purpose of the uvula being understood. He writes that the uvula is situated between the nose, palate and windpipe: 'to break the violence of the aire drawne in by breathing, & that by delay it might in some sort temper and mitigate it by the warmenesse of the mouth'.³⁰ The uvula, also known in this period as the 'gargareon' or 'columella', was also believed to be an essential part of the production of articulate speech. Paré observed that patients who have lost their uvula through disease or accident, 'have not onely their voice vitiated and depraved, but speake ill favouredly, and as they say, through the nose' (pp. 193-4). That is before they 'fall into a consumption by reason of the cold aire passing downe before it be qualified', and so it is clear that the uvula was believed to be important to good health. As well as tempering the air that flows through the mouth and nose to the lungs, the uvula, according to Paré, is 'also a meanes to hinder the dust from flying downe through the weazon [the trachea] into the Lungs' (p. 194).³¹ Crooke gives a similar account of the uvula's purposes in Mikrokosmographia but adds that Vesalius contests the third purpose given above, and argues that 'because other creatures that drawe their breathes nearer the earth (and so more in danger of dust then men) have not yet this Uvula'.³² Another common reason given for the presence of the uvula is that it acts as a collector for humours which fall from the brain and retain the fluid as a way of ensuring that the palate stays moist; this not only stops the mouth from becoming dry but also helps the voice as Crooke goes on

³⁰ Paré, The Workes of that Famous Chirurgeon, p. 193.

³¹ 'weasand', OED entry 2a: The trachea or windpipe.

³² Crooke, *Mikrokosmographia*, p. 624.

to give explanation. Crooke acknowledges that this information is taken from sixteenthcentury Italian anatomist, Costanzo Variolo,³³ and states:

The Uvula receiveth the excrement of the braine convayed unto the Phlegmatick glandule through the Tunnell; this excrement it imparteth unto of the Palat, the Tongue and other instruments of the Voice to moisten them, that which is overplus is cast out by spitting and hauking. For as in a Flute the Sound will not bee shrill and cleare unlesse it bee wet, so it is in the voyce of a man.

(p. 624)

Though, in *Mikrokosmographia*, Crooke agrees that the uvula is essential for retaining moisture in the mouth, he explains that, he puts forward an anecdote told by botanist Casper Bauhine which implies that it is not the loss of the uvula which affects the quality of the voice, but the loss of other substance constituting the palate. It is the story of a merchant who, years previously, had lost his uvula to 'a defluxion of sharpe humours' (p. 624). He found that his speech did not falter, but the loss of his uvula left him vulnerable to disease and he 'grew Tabid, that is, into a consumption' (p. 624). He adds that Bauhine clarifies the significance of this anecdote by pointing out that those who lose their voices through venereal disease do not just lose their uvulas but 'the Ulcers eate away a great part of that glandulous body which is betwixt the Bone and the coate of the Palate, or else the bone of the Palate and the membrane is perforated' (p. 624). Crooke supports this theory by stating that Fallopius [Gabriele Falloppio] concurs with this conceit.

Knowing that the uvula was understood to temper and distil the influx of humours from the brain to the mouth, Paré's explanation of how the uvula could become enlarged [i.e. a 'fallen palate'] begins to make logical sense. Listing the purposes of the uvula, as indicated above, Paré explains that 'it often growes above measure by receiving moisture falling downe from the brain, becoming sharpe by litle and litle from a broader and more swolne *Basis* [where it is attached to the palate]' .³⁴ He catalogues the many symptoms caused by this swelling and they include 'by continuall irritation of the distilling humor the Cough is caused', this 'also hinders sleepe' and 'the liberty of speech' (p. 294). Even more seriously, Paré's concerns extend to the fact that interrupted breathing may mean that the sufferer is forced to sleep with their mouth open which means 'they are exercised with a vaine endeavouring to swallow (having as it were a morsell sticking in their jawes) and are in

³³ Giovanna Ferrari, 'Public Anatomy Lessons and the Carnival: The Anatomy Theatre of Bologna', *Past and Present*, 117 (1987), p. 69.

³⁴ Paré, *The Workes of that Famous Chirurgeon*, p. 293.

^{&#}x27;Basis' OED entry 4.: That part of an organ by which it is attached to its support.

danger of being strangled' (p. 294). *Bartholinus Anatomy* repeats this explanation for the swollen uvula stating that 'by reason of Humors too much flowing in, it hangs two much down, which is called *Casus Uvulae* the *falling down of the Palate of the Mouth*'.³⁵

Cures for the Fallen Palate/Uvula

Given the number of health problems that could be caused by the fallen palate or uvula, it is natural that remedies or cures should be offered by writers from a number of different disciplines. The most popular type of cure offered was botanical. A compilation of natural remedies entitled The Gardeners Labrynth was published posthumously in 1577 which was assembled by writer and translator, Thomas Hill, under the pseudonym Dydimus Mountaine.³⁶ In this collection, Hill offers a number of cures for the fallen palate or uvula including colewort, mustard seeds, purselane and 'water of mints'.³⁷ According to this text, the primary uses of colewort are 'that this Herbe cooleth and moystneth' which helps 'to procure the monethly course [or menstrual periods] in women' and also 'cure the eyes' (p. 10). Further to this, it can be used as an antidote to eating poisonous mushrooms and also because it 'doth yield a mightie nourishment in the body [...] that children eating of the Coleworte for a time, do the speedilyer goe alone' (p. 10).³⁸ As well as having nourishing properties, colewort was also believed to have purgative qualities and could draw out corrupt humours from the body. For this reason, it could also be used to help cure ulcers and canker sores. Having this property also makes colewort a natural choice for curing the fallen uvula caused by ill humours falling from the brain and putrefying on the palate. Hill advises:

And if it shall happen through a distillation or Rheume from the head, that the Uvula or roufe to bee fallen into the throte, the juice then of the rawe Coleworte applied to the head, wyll in shorte tyme recover, and staye the same in the proper place, a secrete in very deede, worthy to be noted.

(p. 10)

William Langham, writer of *The Garden of Health* also suggested that colewort could be used to aid the fallen palate, albeit administered in a different fashion: 'Mouthe flap fallen, apply the ashes of the roote'.³⁹

³⁵ Bartholin, *Bartholinus Anatomy*, p. 154.

³⁶ 'Thomas Hill [*pseudo*. Didymus Mountaine'] (c.1528-c.1574), *ODNB*.

³⁷ Thomas Hill, *The Gardeners Labrynth* (London, 1577), p. 45.

³⁸ 'to go alone' OED entry 1a: to walk without support.

³⁹ William Langham, The Garden of Health (London, 1597), p. 154.

In addition to colewort, Thomas Hill also suggested that mustard seed, amongst its many other uses, could 'amendeth the falling of the uvula'.⁴⁰ Mustard seed was thought to share similar purgative qualities with colewort and its curing effect would therefore rely on its ability to 'purgeth the braine' and 'draweth downe fleume from the heade' (p. 139). John Smith also suggests mixing the seed with a 'Drink' and using it as a gargle which should 'draweth up the Pallat of the mouth being fallen down'.⁴¹ Purslane is also mentioned in numerous botanical texts as having similar properties and Hill states that 'Plinie reporteth, that the roote of the Herbe hanged with a threede (about the necke) removeth the griefe of fall of the Uvula, which like hapned to a Judge in Italie' (p. 68). Also, 'water of mints' is said to 'restoreth the Uvula fallen' if mixed with Rue and Coliander [coriander] (p. 45).⁴² The water is made by finely shredding the stalks of mint and 'diligently be distilled in *Balneo Mariae* [bain-marie], about the middle of May' (p. 45). The advantages of 'water of mints' is not only the purging effect, but it is also said to aid healing as Hill recommends its use to encourage 'the Scabbes of Children' to heal quickly. These various herbal remedies all share a common purpose: to purge corrupt humours from the head. It is generally recommended that these remedies are either used as a mouthwash, or held in the mouth to allow the treatment to work its way around the mouth and exert its effects on the sufferer's brain. Another way of taking treatment was to gargle with various concoctions. This is because the swollen uvula would appear to be hanging down further towards the throat and has a key role in gargling, hence its other name, the 'gargareon'.⁴³ The fourth edition of eminent Dutch surgeon Paul Barbette's surgical text, Thesaurus Chirurgiae, was published in 1687 alongside numerous treatises translated from other medical writers including Raymundus Minderer and Guliuelmus Fabricius Hildanus. The final section of the entire collection is entitled 'A Body of Military Medicines Experimented', originally penned by Raymund Minderer in 'High-Dutch'. He recommends that 'if thy Throat swell, or the Palate of thy Mouth be fallen down, gargarize thy Throat with warm Milk, wherein Figgs have been boil'd, or sweeten'd with sugar'.⁴⁴

⁴⁰ Thomas Hill, *The Gardners Labrynth* (London, 1577), p. 139.

⁴¹ John Smith, England's Improvement Reviv'd Digested into Six Books (London, 1670), p. 230.

⁴² 'rue' OED entry 1a.: Any of various southern European dwarf shrubs constituting the genus *Ruta*, esp. *R*. graveolens, which has yellow flowers and bitter, strongly scented feathery leaves, and was formerly much used for medicinal purposes. ⁴³ 'gargareon' OED: The uvula.

⁴⁴ Paul Barbette, Thesaurus Chirurgiae: The Chirurgical and Anatomical Works of Paul Barbette (London, 1687), p. 56.

Another mode of cure presented an altogether more brutal prospect. Thomas Bartholin's Bartholinus Anatomy contains a chapter entitled 'Of the Parts Contained in the Mouth, viz. the Gums, Palate, Uvula, Fauces, and Throat-Bone'.⁴⁵ As mentioned earlier, Bartholin describes how the falling of the uvula is caused by an influx of humours causing it to hang lower than it should. Bartholin recommends that 'if it cannot be restored to its place by Medicaments nor manual operations, it is wont to be burnt and cut by Skilful Chirurgeon'.46 Bartholin gives no further details of what 'manual operations' might entail, but implies that there are other options to explore before the flesh is burnt and cut away. Ambroise Paré, in his own inimitable way, provides a set of in depth descriptions of, not only the operation itself, but also when and why it should or should not be performed. The first stage of attempting treatment should be, as suggested previously, a number of different purging treatments, gargles and 'a convenient diet'.⁴⁷ If this fails to cure the fallen uvula, then the next step is to apply a 'causticke of Aqua fortis'.⁴⁸ Paré points out that if this fails to work, despite the fact he has used this method 'divers times [...] with good successe', then the physician must try to help in a more direct way, save putting the patient at risk of choking on his fallen uvula (p. 294). Paré makes it clear that it is up to the surgeon to judge the best method of treating the uvula, if at all, based on the appearance of the inflamed part. He advises:

For the Chirurgeon shall not judge the *Uvula* fit to be touched with an instrument or caustick which is swolne with much enflamed, or blacke blood after the manner of a *Cancer*; but hee shall boldly put to his hand if it be longish, grow small by litle and litle into a sharpe, loose & soft point; if it be neither exceeding red, neither swolne with too much blood but whitish and without paine. Therefore that you may more easily and safely cut away, that which redounds and is superfluous.

(p. 294-5)

Once the surgeon is satisfied that the patient is a suitable candidate for surgical treatment, he must 'desire the patient to sit in a light place, and hold his mouth open; then take hold of the top of the *Uvula* with your sizers, and cut away as much thereof as shall be thought unprofitable' (p. 295).

Jacques Guillemeau also describes a similar operation with much the same process of deliberation as to when the operation is safe to perform. He justifies the invasiveness of the procedure by pointing out that the patient 'might be freede from many more miseries,

⁴⁵ Thomas Bartholin, Bartholinus Anatomy Made from the Precepts of his Father (London: 1668), p. 154.

⁴⁶ Bartholin, Bartholinus Anatomy, p. 154.

⁴⁷ Paré, *The Workes of that Famous Chirurgeon*, p. 294.

⁴⁸ 'aquafortis' OED entry 1.: The early scientific, and still the popular, name of the Nitric Acid of commerce, a powerful solvent and corrosive. Entry 2.: Also used of other powerful solvents.

calamityes, & mischances' including a cough causing by the continued irritation of the long uvula at the back of the throat, loss of sleep and the potential choking hazard.⁴⁹ Guillemeau gives even more detail than Paré instructing the surgeon to 'depresse his [the patient's] tunge with the Speculum oris' although it can be noted that Paré includes the speculum oris on his illustration of the instruments necessary for this operation.⁵⁰ This tool guides the surgeon to place a specially designed instrument around the uvula to help him to mark where he needs to cut (p. 25). Furthermore, he advises that, in making the cut, the surgeon should pull the scissors towards him as he cuts to ensure that he is only cutting the flesh that is below the instrument mentioned above. The danger of cutting too much is that the patient can then be left with 'want of speech, or dumnes' (p. 25). Guillemeau has also considered what should happen immediately after the surgery has been carried out and advises that if the patient starts to bleed heavily, the surgeon must 'cause the patient to gargrise his mouth with water and vinegar, and then with some constringent decoctione which hath bin boled with grosse redde wyne' and even more eye-wateringly: 'touch the place, or wype it with some stronge cauterisinge water, wherewith the opened vaynes might be seared together' (p. 25). Guillemeau differs from Paré in the second method of surgical cure that he offers, which is by cautery. Again, he recommends that the surgeon fashion a guide in the shape of a silver or copper pipe which has 'a little apertion [opening] or [...] little window' which will allow the surgeon to aim his cauterising instrument carefully towards the flesh that needs to be removed (p. 45). The surgeon then must then 'put into the pipe your glowinge actuall cauterye' and 'cauterize, and cutt of the palate even, and smothe' (p. 25). Guillemeau provides an alternative to the glowing cauterising instrument in the form of a 'potentiall cauterye' which is administered in much the same way as the actual cautery, using the pipe as a guide.⁵¹ Guillemeau is keen to highlight that the surgeon must work 'dilligentlye' and make sure that no part of the caustic agent is permitted to touch any other spongeous parts of the mouth, such as the tongue, lest they suffer corrosive effects. For this reason he advises against using a liquid cauterising agent, such as aquafortis, as it is more difficult to control especially if a patient is likely to squirm during the procedure. Assuming the patient can bear it, the post-surgical treatment advised here is to 'anoynt the palate with a little oyle of roses,

⁴⁹ Guillemeau, *The French Chirurgerye*

⁵⁰ Paré, The Workes of That Famous French Chirurgeon, p. 295.

⁵¹ 'potential cautery' OED entry 2.: Designating (the use of) a cauterizing agent other than a red-hot implement, esp. a caustic substance; contrasted with *actual*.

with a little cotton or linen there in being madefied, and made fatt, then shall the patient washe his mouth with a little rosewater' (p. 25).⁵²

Guillemeau makes brief mention of a third method which involves tying a 'ligature' around the uvula's excessive length and as the blood supply would be cut off, the end of the uvula can be cut without away without concern about loss of blood (p. 26). Paré seems to put more faith in this method as he includes more detail about its execution and illustrations of the instruments to be used. Paré explains that the surgeon should feed a loop of thread through an iron rod, put the loop around the uvula and 'twitch' [give a sudden abrupt pull] it in order to begin the process and mark which part of the uvula is to be removed.⁵³ This done, the thread is to be left to 'hang out of the mouth' and 'every day it must be twitched harder than other, until it fall away by meanes thereof'.⁵⁴ For such invasive and painful procedures to have been of real concern. For those who found the idea of having the end of the uvula burnt, cut or gradually strangulated, Sir Kenelm Digby, offers an altogether more gentle cure.⁵⁵ In *Choice and Experimented Receipts in Physick and Chirurgery*, Digby offers a number of herbal cures but his suggested treatment for the falling of the uvula is one of the most unusual. He advises:

Gag your self with the Joint of your Thumb, whose one end joyneth to the Hand, and the other is the middle Juncture of the Thumb: let your two Rows of Teeth rest upon these two ends of that Joint, so as to maek you gape wide; keep yourself gaping thus as long as you can, all the while sucking in your Breath. When you are weary, take out your Thumb and rest; then repeat it again, and rest again when you are weary; you shall not have done so twice, but your *Uvula* will be restored to its due place.⁵⁶

A similar cure is mentioned in John Browne's *A Complete Treatise of the Muscles as they Appear in the Humane Body*, albeit slightly more scientifically expressed. In attempting to account for the muscles of the palate which hold the uvula up above the throat, Browne states that 'the Uvula being relaxt [fallen] is commonly reduc't by thrusting the Thumb bent toward the Palate or these Muscles'.⁵⁷

⁵² 'madefied' OED: That has been made wet; wet.

⁵³ 'twitch' OED entry 1: To give a sudden abrupt pull at; to pluck; to jerk; to pluck (a person) by some part of the body or dress.

⁵⁴ Paré, *The Workes of that Famous Chirurgion*, p. 295.

⁵⁵ 'Kenelm Digby (1603-1665)', *ODNB*

⁵⁶ Sir Kenelm Digby, Choice and Experimented Receipts in Physick and Chirurgery (London, 675), p. 77.

⁵⁷ Thomas Browne, A Compleat Treatise of the Muscles as they Appear in the Humane Body (London,681), p. 47.

Conclusion of Chapter Three

The vulnerability of the palate in this period engenders much attention in early-modern writings. Those in the field of medicine wrote detailed anatomies which shared their understanding of the construction of the palate and the important role it played within the humoral system. There were also numerous medical writers keen to propose cures, both medicinal and surgical, for those who were trying to live with a palate that was compromised by disease or injury. Most cures were concoctions of herbs and plants which combined to produce a purging effect on the body, but some were more invasive as described in the surgical directions of Ambroise Paré, Jacques Guillemeau and Thomas Bartholin. Similarly to the teeth, signs of degeneration in the palate must have been an alarming discovery for the sufferer as, though there are accounts of the palate healing itself, a palate that has healed with gaps, fistulas or a cleft were difficult to treat. As outlined in this chapter, an obturator could be fashioned which would provide temporary relief, allowing the sufferer to eat, drink and speak more easily but one can imagine that the makeshift object made of metal and sponge would not be altogether unnoticeable in daily life when positioned in the fleshy roof of the mouth. Cauterising the palate to allow the swelling to block a hole would leave the membrane vulnerable to infection and knotted with scar tissue. There is also the likelihood that the palate damage would have a lasting impact on the speech of the individual, which could lead to social denigration due to the association of the pox-eaten palate and venereal disease.

The palate was an important part of procedures which required humours to be purged from the brain. Because of the situation of the roof of the mouth, below the brain and in front of the throat, it needed to be health and intact in order to support the purgation process. Ointments could be applied to the palate to stimulate salivation in order to clear corrupt humours from the head. The problem with this role is that humours could become distilled in the soft palate or on the uvula and this would be understood to induce the problem of the fallen uvula or soft palate. Today this would be interpreted as a swollen uvula due to irritation or infection, but in this period, the appearance and physical sensation of the uvula resting on the back of the tongue lends itself to the conclusion that the uvula or soft palate has dropped. Not only would this cause difficulties with eating, speaking and sleeping, but there was also concern that the uvula hanging down into the throat was a choking hazard, which helps explain why suggested treatment was often drastic and invasive such as cauterisation or surgery. The main propagators of surgical cures were sixteenth-century French surgeons, including Ambroise Paré and Jacques Guillemeau, but their advice survived in multiple translated editions in England. Whether this was commonplace practice in England is unascertainable, but it does suggest that the fallen or swollen uvula/soft palate was enough of a threat to a person"s health to consider drastic action. This may help explain the why surgeons would operate on a cleft that was damaged and inflamed, but were more reticent when it came to the congenital cleft palate; the diseased or infected soft palate posed a threat of suffocation, whereas the congenital cleft palate, if the individual survived into adulthood, only posed an indirect threat insofar as choking and/or vulnerability to disease.

The fact that the fallen uvula was explained by way of being overly satiated with humours rather than a fleshly inflammation also provides an insight into the experience of living in a body that was understood to operate based on a complex balance of humours. As described the soft palate was understood to play an important role in the flow of humours and this flow was necessary for keeping the mouth and palate moist and healthy. If this process was too efficient, however, the palate could become overloaded with too many humours, or if the humour was considered corrupt, too hot or too cold, then the soft palate would become inflamed or the uvula would drop. This implies that the health of the body was very much read in terms of what was happening with bodily fluid and this therefore suggests that while the palate was not necessarily examined as an indicator of good health, its decline was great cause for concern, not just in terms of physical discomfort and impediment, but also because its impairment could cause obstruction or disruption in the overall flow of humours through the body; this is especially important if it hinders the vital process of old or corrupt humours leaving the body.

One particularly interesting aspect of treatment is the obturator. Medical writers encouraged readers to fashion their own obturators either by a visit to the goldsmiths or by fashioning a 'tent' of material which could plug the gap in the roof of their mouth. This is a good example of the practical attitude of people in this period towards their own health and also underlines the notion that people were being advised to take proactive steps in order to improve their own health, rather than relying on expensive and potentially unreliable medical treatment. The development of obturators also makes clear that people living in this period were concerned with their articulation and the sound production of their voice as for obturators to work there needs to be enough stable flesh for the device to sit properly, and they would therefore be most useful in patients who were suffering with minor clefts or fistulas, rather than very severe palate damage. The obturator would therefore be an instrument for improving the voice, rather than necessarily restoring it. There is little mention of obturators being used for palates that are cleft congenitally. It is unclear whether this is due to low numbers of survivors with congenital cleft palates, or whether it was simply overlooked in medical works. It seems feasible that if the notion of palate obturators in their various forms was in the public domain than an adult with a congenital cleft palate may have fashioned their own device, but this is not documented in early-modern writings. This could be due to cleft patients who have lived with cleft palates their entire lives being self-sufficient in developing their own mouth plate and not seeking medical help, or it could be that the congenital cleft palate was not seen as something that needed remedying in the same way as a palate that has changed or been altered later in life and needs repair. This is conjectural, but it worth noting that, though discussion of palatal obturators is not common in early modern literature, as explored in this chapter, where they are presented it is with a view to replenishing what has been lost, rather than plugging a gap that was created at birth.

In literature, this connection was exploited to imply a person of ill-repute or unsavoury lifestyle. Such a palatal impairment was not necessarily regarded as a result of venereal disease or syphilis, but it could also be caused by excessive use of mercury-based products which were used cosmetically on the face.⁵⁸ One of the prevalent criticisms levelled at women in verse in this period is falsehood and pretention, and it is therefore easy to see how a woman with a 'snuffling' voice caused by her desire for superficial beauty even by dangerous means might be viewed as licentious and unappealing. Equally, if venereal disease was the most well-known cause of such an impediment it is easy to see why writers were able to use the association to their literary advantage. However, it is vital that speculation about the real prevalence of stereotypes such as in society are treated with sensitivity, as one of the dangers of making sweeping assumptions is that it strips the early-modern individual of empathic understanding. It may be true that the association between the damaged palate and venereal disease was well-recognised, but it does not mean that those with speech impediment similar to that caused by syphilis were necessarily judged as being immodest.

This chapter has concentrated on the unhealthy palate as this is a productive place to begin in terms of establishing some of the health concerns relating to the roof of the mouth and also thinking about what treatments were being recommended. It has also underlined the vital function of the palate in the early-modern body and how grave the consequences could

⁵⁸ Tanya Pollard, *Drugs and Theater in Early Modern England* (New York: Oxford University Press, 2005), p. 84.

potentially be, in terms of health and social perception, if the condition of the palate went into decline. The research completed for this chapter indicates that the palate in early-modern culture is a worthy avenue for further investigation, especially in relation to its other function, taste. Because of its situation and passive functionality, the roof of the mouth is often overlooked in terms of research into the early-modern body but its health is vital for everyday functioning, and it was particularly vulnerable due to the nature of some of the diseases that were rife in this period. It was possible for an adult to survive with a damaged palate, but it is clear from the alternative treatments proposed by various writers, that there was a market for those who offered solutions, no matter how extreme. It is impossible to ascertain with certainty whether the eagerness was to correct due to the potential for societal judgement based on the kinds of diseases which brought about palatal damage, but in any case it is clear that it was a condition people could, and were keen to, improve.

<u>Chapter Four</u> <u>'The Child comes into the World with it': Cleft Lip and Palate in Early-Modern</u> <u>Culture</u>

The final chapter of the thesis is a case study of a congenital oral anomaly known as the cleft lip and/or palate. Studying the history of this condition in the early-modern period draws attention to many oral health issues, such as the role of the palate in speech and eating and the risks of oral surgery. Prior to this point, the thesis has focussed on oral health as a concern of adults as, sometimes through their own behaviours, the condition of their teeth and palate deteriorates. As the congenital cleft lip and/or palate occupies an altogether different position as in reading literary and medical responses to the cleft-affected mouth, it is possible to gain an insight into how a child who unwittingly came into being with an oral anomaly is received by society. The chapter explores how clefts were defined and treated by various physicians and surgeons. It will also investigate the genuine significance of the supposed role of the maternal imagination in the creation of the cleft lip, in which the etymology of the term 'hare-lip' plays a key role. The development of cleft lip, and later cleft palate surgery, will be considered with a view to ascertaining how commonplace surgical cleft repairs were. Finally, the chapter explores the presence of the cleft in literary materials. This provides the great benefit of giving various perspectives on the cleft in an environment where medical answers or resolutions are not expected.

During the second month of pregnancy, the nose, upper lip and palate of the infant begin to take shape. Initially, they are formed separately but by the tenth week of pregnancy the distinct parts fuse to create the coherent shape of the face. In some embryos, however, this process is not completed and the result is a child born with a cleft lip and/or cleft palate. A child can have either a cleft lip or cleft palate in isolation, or have a complete cleft and palate. The cleft can be unilateral, on the left or the right side, or bilateral, on both sides. Sometimes, if the cleft is significant enough, the nose can also be affected as it effectively causes the collapse of the nostrils on one or both sides, depending upon the nature of the cleft. Due to the interconnected nature of the otorhinolaryngological system, other health issues are often associated with the cleft lip and/or palate such as dental problems, hearing difficulties, speech impediments and, especially in babies, difficulties with feeding. While it is known how clefts are physically created, the systemic cause of the facial cleft is not clear. It has been known to occur frequently in some families yet many cases are isolated. The frequency of the condition in Britain today is thought to be approximately 1 in every 1000 babies born will be affected by some sort of facial cleft.¹

Clefts provide a unique axis on which to explore a number of issues associated with oral health and surgery. It also allows consideration of the level of tolerance in early-modern society to those with facial difference, especially around the mouth. This chapter will comprehensively collate written references to the cleft lip and/or palate in seventeenthcentury England and analyse how the condition is described by people writing from a number of professions such as authors, playwrights, clergymen, midwives and surgeons. It is difficult to establish how frequently cleft lips were repaired but it is clear from surgical accounts that it was viewed as a relatively minor procedure. There is an expectation that the response of the early-modern individual to a person with a pronounced congenital birth defect would be that of fear, or suspicion, either of the individual or a child's parents. In assimilating relevant material it is clear that evidence of this kind of reaction to the highly visible cleft lip was scant. There is also an erroneous assumption made by some critics that surgeons were somehow unwilling to operate on a congenital cleft palate because it has been mistaken for consequence of venereal disease.² In fact, this seems to have been viewed as a minor problem that could be solved. Indeed, very subjective views of the appearance of the condition are very rare until the eighteenth century which seems altogether more concerned with the aesthetic problem, as opposed to the practical issues of speech and eating. As will be discussed, the cleft palate presented a much more complicated problem. Although much less visible, not having a palate intact at birth rendered survival difficult because of an inability of the infant to suckle. In spite of this, cleft palate surgery was not developed until much later, in eighteenth-century France. This chapter will, therefore, also consider possible hurdles to the advancement of palate surgery and challenge existing ideas, referred to above, about surgeons being unwilling to operate on a congenital cleft palate because it has been mistaken for consequence of venereal disease.

¹ Philip Stanier, 'The Causes of Cleft Lip and Palate: Where Have we Got to with Gene Research?', *Cleft Lip and Palate Association website (CLAPA)* < <u>http://www.clapa.com/medical/article/331</u>> [accessed 1st February, 2012]

² Laura Snell, 'Cleft Lip and Cleft Palate Repair: Victims of Surgical Indifference?', *Proceedings of the 11th Annual History of Medicine Days* (2002), p. 197.

The 'Harelip' and the Maternal Imagination

A common synonym for the cleft lip is 'harelip'. This term, now deemed offensive by the Oxford English Dictionary for reasons discussed shortly, is often attributed to Galen who referred to the condition as 'lagocheilos', which is transliterated from Greek as as 'harelip'.³ Sharon Kim's essay entitled 'A Rosebud by Any other Name; The History of Cleft Lip and Palate Repair' traces the term back as early as the seventh century C. E. where it has been found in the Chin Annals. Kim explains that these documents include the biography of a young Chinese man, Wei Yang-Chi who was born into a farming family in the fourth century C. E. and eventually became a governor-general of six provinces. Wei Yang-Chi was born with a 't'u ch'ueh' which translates as 'defect appearing in the hare'. It is impossible to discern whether the term harelip held the same implicit associations then, and internationally, as it did in the early-modern England. Without further evidence, it is sensible to assume that the hare comparison is used simply because of the similarity between the cleft lip and the lip of the hare which is split. Certainly by the sixteenth-century in England, beliefs had taken hold that if a pregnant woman were to see, be startled by or long for the taste of a hare, the child would surely be born with the mark of the hare, the cleft lip. Thomas Lupton's popular miscellany of folklore, A Thousand Notable Things of Sundry Sortes, contains a small section of superstitions related to childbirth.⁴ The sixth item in this list states:

Many women with child of sodaine or unlooked for, meeting, or sodaine seeing of an Hare, or for the desyre or longing to eate of the same: do bring forth children with a cloven overlyppe, and forkedwyse, called a hare lyppe.⁵

Nicholas Culpeper goes a step further in saying that if a pregnant woman 'seeth any thing cut with a Cleaver, she brings forth a divided part or a Hare-lip'.⁶

The idea of the maternal imagination working in this way complicates the etymology of the term harelip, as it is often assumed that it was created because of the belief that the hare caused the cleft lip. Historically, evidence intimates that the word was actually used because of the supposed similarity in appearance to the hare's lip, rather than because of the

³ Sharon Kim, 'A Rosebud by any Other Name: The History of Cleft Lip and Palate Repair', *Proceedings of the* 9th Annual History of Medicine Days, (2000)

http://www.ucalgary.ca/uofc/Others/HOM/Dayspapers2000.pdf> [accessed 24th September, 2011] pp. 42-58. ⁴ Thomas Lupton, *A Thousand Notable Things* (London, 1579), p. 26.

⁵ Lupton, A *Thousand Notable Things*, p. 26.

⁶ Nicholas Culpeper, Culpeper's Directory for Midwives: or, A Guide for Women (London, 1662), p.146.

association of the hare causing the harelip through the maternal imagination. It is safe to assume, therefore, that the hare's role in the causation of clefts was also thought to be due to the similarity in appearance, rather than something borne out of the linguistic association created by the word harelip. However, one would imagine that this term may have encouraged the propagation of the hare encounter as an explanation. Medical texts frequently use the term harelip, without raising the possibility that the cleft could have been caused by a hare. It is essential to note that, although the mythological role of the hare in the creation of the cleft lip was often referenced when a writer discussed the cleft, it is more often than not omitted in medical texts. Indeed, many early-modern texts explicitly state that the term harelip is used due to the similarity in appearance to the hare's lip. In the section of Anatomical Exercitations which deals with the formation of the deer in the uterus, William Harvey explains how the face of the deer foetus is formed in the third month of pregnancy. He asserts that 'the mouth lies gaping wide even from Ear to Ear: for the Cheeks and Lips are last of all perfected, as being *cutaneous parts*'.⁷ Harvey relates this to the formation of the human uterus by explaining that 'for this cause, as I conceive, many are born with *cleft lips* [...] because in the formation of the *humane foetus*, the *upper lips* do very slowly close^{*}.⁸ He also clarifies that 'we call them Hare-lips, that is, having such lips as Hares and Camels have' (p. 427). Later, French physician M. De La Vauguion also makes his interpretation of the word 'harelip' clear as can be seen in a 1699 translation of his work A Compleat Body of Chirurgical Operations. Here Chapter 4, 'Of the Hare Lip', provides detailed instructions for how to perform surgery to repair the cleft lip but, in-keeping with the format of the rest of the text, he opens the section by stating what the ailment is, and what is believed to have caused it. Of the 'hare lip', he avers that 'this Deformity derives its name from the Resemblance to the Lips of Hares which are cleft after the same manner⁹. His explanation for the cause of the

The idea of the power of the maternal imagination is one which appears in many popular medical tracts, but it is impossible to discern with any great level of certainty how widely the notion of the maternal imagination was accepted by early-modern English society. Jane Sharp wrote in her 1671 gynaecological treatise *The Midwives Book* that: 'Imagination can do much, as a woman that lookt on a Blackmore brought forth a child like to a Blackmore; and one that I knew, that seeing a boy with two thumbs on one hand, brought

cleft lip is simply that 'the Child comes into the World with it' (p. 20).

⁷ William Harvey, Anatomical Exercitations (London, 1653), pp. 426-427.

⁸ Harvey, Anatomical Exercitations, p. 427.

⁹ M. de la Vauguion, A Compleat Body of Chirurgical Operations (London, 1707), p. 20.

forth such another; but ordinarily the spirits and humours are disturbed by the passions of the mind, and so the forming faculty is hindered and overcome with too great plenty of humours that flow to the matrix'.¹⁰ And similarly, there are many more texts which detail the phenomenon as though it were immovable fact, but it is vital to take into consideration the nature of the texts which perpetuated this myth. The aforementioned Thomas Lupton's text was primarily interested in collating ideas 'of note' and contains many descriptions of similar notions of predestination based on the conditions surrounding conception, pregnancy and birth. It is clear that Lupton was fairly convinced of the power of the hare as he later reiterates the idea when proposing an antidote for the purpose of elaborating on why the proposed cure will work, but Lupton cannot resist reassuring his reader that 'this was very credibly told me for a trueth' and 'therfore I have placed it here, as worthy the name of a notable thing' (p. 83).

Another significant seventeenth-century text which supports the idea of maternal imprinting being a cause of the cleft is Robert Burton's Anatomy of Melancholy. In speculating about the various proposed causes of melancholy, Burton includes a section on whether the disorder is caused by 'our temperature in whole or part, which we receive from our parents'.¹¹ He explains that 'if shee [the mother] be over-dull, heavy, angry, peevish, discontented, and Melancholy, not onely at the time of conception, but even all the time she carries the childe in her womb [...] her sonne will be so likewise affected'; similarly, 'if a great-bellied woman see a Hare, her childe will often have an Hare lip, as we call it' (p.84). Burton provides citations throughout this section to support his plea for scholarly recognition and attributes evidence of maternal imagination to 'Baptista Porta in Phisiog. Coelestis' [Celestial Physiognomy]; this is an important text in the development of physiognomy which he repeatedly cites throughout his work. Amid a number of other anecdotal examples of the maternal imagination at work, Porta explicitly states in his much-reproduced compilation text Natural Magic that 'many children have hare-lips; and all because their mothers being with child, did look upon a Hare'.¹² Neither Robert Burton nor Giambattista Della Porta were anatomists by profession yet, through their similarly multidisciplinary approaches, both sought to impress upon their reader the power of the human mind combined with their

¹⁰ Jane Sharp, *The Midwives Book, Or, The Whole Art of Midwifery Discovered* (Oxford, Oxford University Press, 1999), p. 92.

¹¹ Robert Burton, Anatomy of Melancholy (London, 1621), p. 80.

¹² Giambattista della Porta, Natural Magic (London, 1658), p. 51.

humoral composition. Taking the motives of the writers into account, it is clear they have included the example of the hare causing the cleft lip because it was a popular example of the myth. It is vital, though, that the modern reader does not take this evidence as indication that the superstition was believed at large by early-modern society. It is, of course, more than likely that this false notion of causation lingered, but exploring the types of texts which dismiss the myth and those which propagate it, it seems increasingly likely that it may have had the status of a superstition, rather than a strong-held belief. This supposition is based on an overview of early-modern writings which deal with the cleft. There are, of course, exceptions to the rule.

The Midwives Book, Or the whole Art of Midwifery Discovered, mentioned above, was a text which borrowed ideas and expressions from many key medical texts of the time, as is commonplace in medical texts of this period.¹³ Sharp's modern editor, Elaine Hobby, outlines the extent to which Sharp borrows material from contemporaneous midwifery manuals, such as those written and translated by Nicholas Culpeper. Little is known about the life of Jane Sharp herself, but it is clear from her text that she writes from a position partially of book learning, or 'speculation' as she terms it, but predominantly as a woman of vast empirical experience from the birthing chamber. In the second book of six, Sharp includes various chapters concerned with the conception and formation of the child. Chapter V, entitled '*Of the Causes of Monstrous Conceptions'*, provides a vague cluster of examples of maternal imprinting. Here, Sharp makes a brief allusion to the cleft lip as she writes, explaining that 'the child takes part of the mother's life whilst he is in the womb' and therefore may:

be hairy where no hair should grow, or Strawberries or Mulberries, or the like be fashioned upon them, or have lips or parts divided or joined together according as the imagination transported by violent passions may sometimes be the cause of it. (p. 93)

Sharp elaborates further on the relative impact of the maternal imagination compared with 'the heat or place of conception' and states that 'imagination holds the first place, and thence it is that children are so like their Parents' (p. 93). Although the allusion to the cleft-affected mouth is brief, it acts as an interesting precursor to Sharp's later development on this theme. The second and final chapter of Book III deals with the 'great pain and difficulty in Childbearing, with the Signs and causes, and cures' (p. 129). It is here that Sharp makes clear

¹³ Sharp, *The Midwives Book*, p. 1.

her position on what can cause a cleft. The first part of the chapter explores many potential causes of miscarriage and equally provides many exotic cures. Towards the end of the chapter, Sharp goes onto give many different examples of how the longings and desires of the pregnant woman can affect the character and appearance of her unborn child. For example, she says that 'some women with child will desire to steal things from others, this is no small argument that the child she goes withal will be a Thief; wherefore she must take care to give it good education, and to bring it up in the fear of *God*' (p. 142). In addition to the dangers of women's longings, a foetus can also be affected by 'suddain fears, for many a woman brings forth a Child with a hare lip, being suddenly frighted when she conceived by the starting of a Hare, or by longing after a piece of a Hare' (p.142). Sharp supports this information, in the same way as Thomas Lupton as mentioned earlier, by referring to sixteenth-century French physician and astrologer, Mizaldus (Antoine Mizauld).¹⁴ She claims '*Mizaldus* thought so and many women cannot deny it to be true' (p. 143).

The certainty with which Jane Sharp presents the idea of a hare causing the harelip cannot be overlooked in the exploration of how far the notion was culturally accepted. As outlined in the footnotes of Hobby's modern edition of The Midwives Book, it is clear that Sharp took the information about Mizaldus from Culpeper's 1656 edition of his A Directory for Midwives.¹⁵ In describing the cause of the cleft lip, Culpeper confidently asserts that the 'cause of it is wel known to be, the Mother in the time of the conception, being affrighted either with sudden starting of an Hare or Coney, or by losing her longing to eat a piece of such a Creature' (p. 122). He then, providing Sharp with her supporting evidence too, states that 'this was Mizaldus his Opinion: And I am confident some women now living, know this to be true enough, yea too true' (p. 122).¹⁶ Comparing the passage from Culpeper with the corresponding extract from Sharp, Culpeper seems to introduce more of a shadow of doubt on the idea. Indeed, in the quotation just given, he intimates that his belief in the concept is based upon anecdotal evidence from women themselves and he has taken some convincing, rather than a firm medical understanding of how the imprinting takes place. Sharp takes a different approach by rephrasing Culpeper and writes that 'many women cannot deny it to be true', implying that the reluctance to believe is based with mothers who have been told the cause, but who have been able to recall some instance where they had seen or longed for the

¹⁴ Sharp, *The Midwives Book*, footnote 6, p. 142.

¹⁵ Culpeper, A Directory for Midwives (London, 1656)

¹⁶ This second part of Culpeper's *Directory* is, in fact, his translation of Daniel Sennert's *Practical Physick, the Fourth Book in Three Parts* which would be published in London in 1664.

meat of a hare during their pregnancy. It is also important to recognise that Culpeper was, and still is, famed for what we would now deem a holistic approach to medicine.¹⁷ This implies that he may be more likely to seek a wider explanation for the malformation of the mouth than simply an interruption in the growth of the foetus.

Both Culpeper and Sharp include a proposed antidote to the hare-sighting attributed to Mizaldus. Culpeper advises 'let a woman slit her Smock at sides like a Shirt, when she goes with child' (p. 122). Sharp embellishes this slightly: 'let a woman slit her smock like her husbands shirt, and that he saith upon his knowledge will do it' (p. 143). This method of cure stems from what is known as sympathetic medicine whereby an object separate to but representing in some way the person who needs treatment is altered in a particular way in order to, hopefully, have an effect on the individual. This was a further aspect humoral theory which also suggested that parts of the body worked through 'familiar sympathy', or, through an innate inclination to work with each other.¹⁸ The status of such antidotes is complicated by the inclusion of an antenatal cure suggested by sixteenth-century Spanish satirical writer, Antonio de Torquemada. He suggests taking the breast of a newly-slaughtered chicken and placing it upon the cleft lip of the child so that 'the warme bloode of the same Chicken, with which is closeth and joyneth together, though never so well but that the marke and token thereof remaineth'.¹⁹ This proposed cure reflects the curious healing properties that seemed to be ascribed to the womb or, perhaps more specifically, to the infant that was in the womb or not long since been born. Many early-modern medical writers talk about the healing powers of the very young due to their moist nature. Torquemada uses the cleft lip, with its clean edges which have to be surgically opened in order to be united with sutures, to illustrate the illogical nature of what was later deemed to be sympathetic medicine.

Cleft Lip Repair

Despite the ideas outlined above, the only real 'cure' for the cleft, of course, was surgical repair. Through extensive exploration of written references to cleft lip and palate in the early-

¹⁷ 'Nicholas Culpeper (1616 - 1654)', *ODNB*

¹⁸ 'Familiar sympathy' is the phrase that the pseudonymous author of *Aristoteles Master-Piece; or, The Secrets of Generation Displayed in All the Part Therof* (London, 1684) expresses the function in relation to the womb on p. 116.

¹⁹ Antonio de Torquemada, *The Spanish Mandevile of Miracles* (London, 1600), fol. 147.

modern period, it is apparent that the isolated cleft lip is the most commonly referred to condition of all of the varieties of clefts of the mouth. This is likely to be a result of its more visible nature when compared with the cleft palate, but also reflects the fact that surgeons were much more willing to provide instruction for successful operations on the cleft lip, when compared with the palate repair. The earliest known reference to cleft lip surgery has been approximately dated to 390 A. D. in China in the aforementioned ancient text, the Chin Annals.²⁰ In European literature, the earliest known reference to surgery upon a cleft is in Bald's Leechbook circa 920 C.E. This text recommends incisions in the edges of the cleft lip and suturing of the two sides to allow the wounds to heal together, which is a very similar practise to the modern surgical repair. In this period, there are many accounts of and instructions for surgical procedures on child and adults with cleft lips. It is, of course, difficult to quantify just how frequently cleft lips were repaired at this time. The cleft palate would certainly have hindered survival due to the inevitable difficulties with feeding, but logically the cleft lip would only prove to be a problem in this respect when the individual is a baby and needs to suckle. Once past infanthood, the main problems caused by having a cleft lip would be aesthetic, and with communication. Early-modern society deemed the cleft lip worth repairing, despite the intrusive and dangerous nature of the surgical procedure. Apothecary Richard Westover notes in a routine entry in his case journal how he repaired a cleft lip.²¹ He records how on 18 February 1696, he visited the home of John Hillman of Mark who became a 'debtor for the cure of his child having a harre lip'. Westover describes how he 'Went and united it the 18th of February' and 'Went agane the 19th and ons before. Went agane the 23^{rd'} for which work he 'Recd in full thirty five shillings' (Sig. 183^v). While the treatment is only mentioned as a routine case it is significant that Westover made two further home visits following surgery to attend to his patient. One further indication of the mainstream nature of the cleft lip repair is the way in which, by the eighteenth century, medical texts dealing with operations sited at different parts of the body start to refer to the technique frequently adopted in 'harelip' surgery as the 'harelip suture'. Also known as the 'twisted suture', the technique involves opening the flesh at the edges of the cleft and, using three pins to hold the two sides together, winding thread around the edges of the pins to hold them and the surrounding flesh in place.²² This method allows the flesh to heal and knit together with less danger of the sutures receding directly into the skin. This method is also

²⁰ Kim, 'A Rosebud by any other Name', p. 42.

²¹ William G. Hall, ed., 'The Casebook of John Westover of Wedmore, Surgeon, 1686–1700', in *Wedmore Genealogy Pages* <www.tutton.org> [accessed 21 November 2010].

²² Henri-François Le Dran, *The Operations in Surgery* (London, 1757), pp. 339 – 346.

recommended for repairing wounds in other parts of the body, including the throat. In *A Compleat Discourse of Wounds* (1678), seventeenth-century surgeon John Browne instructs that, in curing wounds of the throat, the 'Patient is to hold up his Head, hereby bringing the lips of the Wound together; then stitch up the Wound Artificially'. He also advises that the best way to keep the wound closed is with 'Pins as you use in the Cure of hair Lips'.²³ In medical texts which detail different types of stitches, the author often lists the 'hare-lip suture' or the 'suture used to repair the harelip'.²⁴

As evidenced by Westover above, the cleft lip repair seems to be viewed as a relatively minor procedure and as such it was often carried out by mountebanks and advertised as one of the services offered by barber surgeons alongside tooth-pulling and the removal of 'wens'.²⁵ Writer Richard Head compiled a collection of stock accounts detailing the various swindles members of the public may fall prey to and includes in this text a section about 'The Wheedles of a Quacking Astrological Doctor'. In this chapter, Head addresses the travelling mountebank who peddles his wares on the public stage and claims to be able to solve a number of health problems quickly and cheaply. Amongst his list is the cleft lip: 'what excellent Pills, Plaisters, Powders, Spirits, Oyntments, Balsoms, Waters and Elixirs he hath for all diseases that ever were, or shall be; how he did cut off such a Wen, such a sore Brest, heal'd such an Harelip'.²⁶ Earlier in the seventeenth century, an extant single-page advertisement for the services of Nicholas Bowden who claimed to be 'Chirurgeon, cutter of the stone, and also Occulest, curer of the Ruptures without cutting' lists the services that Bowden can offer.²⁷ Most of the remedies proffered involve surgical procedures, although he does also offer to deliver babies when 'Those Women that have so hard travail, that the Midwife cannot performe her office'. He can also cure 'crooked bodies', 'divers externall and enternall diseases' and 'without cutting cure all Ruptures or Burstinges'. The shortest statement in his list is 'All hare or cleft lippes, I cure in short time'. It is unclear why he includes both terms for the cleft lip; it could simply be a quirk of expression but it is also possible that 'hare' lippes refers to the congenital cleft lip and 'cleft' lips refers to lips that have been split in an accident. As surgeons did sometimes distinguish between the two, it seems likely that Bowden would also want to make clear that he was capable of healing both,

²³ John Browne, A Compleat Discourse of Wounds (London, 1678), p. 241.

²⁴ Richard Wiseman, *Eight Chirurgical Treatises* (London, 1719), p. 81.

²⁵ 'wen': OED entry 1a. A lump or protuberance on the body, a knot, bunch, wart. *Obs.*

²⁶ Richard Head, *Proteus Redivivus* (London, 1675), p. 223.

²⁷ Nicholas Bowden, Be It Known to All Men (1605), p. 1.

especially as he advertises himself as a jack-of-all-trades, reinforced by his closing statement '*Those which shall have neede of me, shall have me*'. David Irish, 'Practitioner in Physick and Surgery', also claims to 'cut Hare-Lips, and in a Weeks time perfectly cure them'.²⁸ The notion of cleft lip repairs being performed by mountebanks also found its way into literature. A collection of satirical poems attributed to L. Menton was published in 1698 and describes the many ways in which money can corrupt. Poem LXI 'On Mountebanks' illustrates the way in which these fake medics lay great claim to the cures they offer and that they will travel to 'the place where Money does abound' and 'There up he sets his stage'.²⁹ The poet concedes that of 'a Wen, Hair-Lip, or Cancer too he may / A Cure perhaps perform, and take away' but points out that this is something 'which any one can do as well as he, / That is but skilfull in Chirurgery' (p. 39). The real warning is left to the conclusion of the poem which, in rather patchy metre, warns:

The only thing's your Cash they hanker after; If you ne'er mend, they'll turn't but to a laughter.³⁰

While the writer of this poem suggests that there is a certain amount of surgical skill needed to successfully repair the cleft lip, the stronger warning is given to those who pay the mountebank expecting him to fulfil his promise of curing deafness and/or blindness. Presumably any skill the mountebank has in surgical procedures comes from the amount of experience they have gained from patients willing to gamble their health for the sake of the cleft repair and a potential improvement in their speech and/or appearance. Deafness and blindness, of course, is an altogether more complicated and variable condition and therefore customers were more likely to be left disappointed.

Some of the most interesting medical texts in relation to the cleft include opinion about the age at which patients should be operated on. One of the main arguments is that operating on a child at an earlier age means they are likely to heal faster than an adult due to their moist nature. Part of the humoral hydraulic system of bodily fluids was the assumption that children bodies were more moist than adults. This is because under this system the aging process was essentially a process of the drying out of these vital fluids.³¹ However, some surgeons argue that a baby's tendency to cry seriously hinders the union of the sides of the

²⁸ David Irish, Levamen Infirmi, or Cordial Counsel to the Sick and Diseased (London, 1700), p. 27.

²⁹ L. Menton, *Pecuniae Obediunt Omnia; Money Masters All Things* (London, 1698), p. 39.

³⁰ Menton, *Pecuniae Obediunt Omnia*, p. 40.

³¹ Source about aging and humours

cleft. In his surgical manual, *A Treatise of Chirurgical Operations* (1696), French surgeon, Joseph de la Charrière, expresses a number of opinions on when and in what situations cleft surgery should be carried out. Most unusually for a text of this era, Charrière notes that the cleft is 'often an Hereditary deformity' which he has presumably noticed during direct contact with patients and parents.³² He shows concern about the implications of the surgery to a person's articulation and advises that the operation should not be carried out if there is a very wide cleft because 'the Cutis' ['the skin'] wou'd be so much extended, that it wou'd be very hard to Pronounce well certain Words'.³³ Charrière is adamant that surgeons must not perform cleft repair surgery on infants, because 'by reason of their continual Crying' the operation would be prove 'Useless' (p. 34). He asserts that 'the Union of the *Hair-Lip* is not to be undertaken, but in adult Persons, who have no other incommodity, and are willing to endure pain' (p. 34). Charrière also advises against operating on:

the old Scorbutick [sufferer of scurvy] and Pox'd, in irregular Women, and in several other vitiated and indisposed Subjects, in which the Blood is only a serous Mass, sharp and Corrosive, having lost all its consistence and unctoisity, and consequently incapable of Reunion. (p. 34)

What this passage implies is that, certainly in France, many cleft lips were not repaired in infancy. For Charrière to consider a patient to be fit for surgery they had to have a well-balanced humoral system, particularly in relation to their blood, in order for the operation to have the best chance of success. Charrière suggests that women with irregular menstrual cycles would have highly unbalanced systems due to one of the prevailing belief systems which states that regular menstruation was necessary to cleanse the female body.³⁴ Without regular menstruation a woman's blood was counted as 'vitiated' as Charrière implies. This, combined with the number of follow-up consultations which Westover made to his patient following the 'harre lip' repair which he carried out, suggests that for Charrière and Westover, at least, the operation was not the simple matter that the mountebanks tried to imply. Charrière also includes in his potential patients those who acquired a cleft in their upper lip later in life through injury or disease. This is supported by the introduction to the section 'Of the Hair-Lip' which states that 'this malady comes sometimes from an imperfect Conformation, and sometimes by Accident, *viz.* it may be caused by some Blow, Fall, or

³² Joseph de la Charrière, A Treatise of Chirurgical Operations (London, 1969), p. 33.

³³ 'Cutis' OED, Etymology: Latin = the skin.

³⁴ Patricia Crawford, 'Attitudes to Menstruation in the Seventeenth Century', Past and Present, 91 (1981), p. 54.

other like mischance'.³⁵ The patients that appear in accounts of cleft lip operations vary in age from newborn up to fifty-five years old. As reported in Kim's essay 'A Rosebud by any other Name', the oldest patient described appears in a German text, *Frauendienst*, from the thirteenth century. No explanation is offered as to why surgery was not carried out until he was at the relatively old age, by medieval standards, of fifty five but there is always the possibility that what is being described as a cleft lip is not necessarily a congenital condition but is a lip that has been split through injury or disease. It is difficult to imagine what kind of health problems a congenital cleft lip might present to a man at this stage of his life so it seems likely that either this surgery was desired to improve his appearance or speech or that lip was cleft more recently and therefore would be seen to require mending.

One authoritative source on the topic was James Cooke's Mellificium Chirurgiae, or The Marrow of Chirurgery which was published in many editions over the latter half of the seventeenth-century. Unusually for an early-modern medical writer who deals with clefts, Cooke first acknowledges the many various forms that clefts can take. He states that 'the lip is sometimes much cleft, shewing two or three Teeth of the upper Jaw, sometimes less'.³⁶ This suggests, not only that Cooke met with or heard of enough patients with clefts to be able to develop an awareness of the different shapes the cleft could take, but also perhaps that if cleft lip repair took place, it tended to be when the child was older and possessed teeth. However, he later asserts that cleft lip surgery is best performed on children as young as possible even though it is 'happily perform'd on some of 28 years of age' (p. 196). A later French text, translated into English in the mid-eighteenth century, Orthopaedia, Or, The Art of Correcting and Preventing Deformities in Children by Nicholas Andry de Bois, also argues against performing the operation too early for fear of the infant dying in surgery. The writer also believes that when the child is four or five years old, they are more likely to be able to keep their face still when the wounds are healing therefore minimising any danger of further deformity.³⁷ M. de La Vauguion, writing at the turn of the eighteenth century, agrees with this thinking stating that the 'continual crying, softness of the part, and the necessity of sucking would hinder the Unition'.³⁸

³⁵ La Charrière, A Treatise of Chirurgical Operations, p. 34.

³⁶ James Cooke, *Mellificium Chirurgiae* (London, 1700), p. 195-6.

³⁷ Nicholas Andry de Bois Regard, *Orthopaedia* (London, 1743) p. 102.

³⁸ La Vauguion, A Compleat Body of Chirurgical Operations, p. 20.

Cooke also acknowledges the cleft palate by stating that sometimes 'the Roof of the Mouth is parted in two', but then goes on to describe the operation which only repairs the cleft lip.³⁹ The reason for this seems to be that Cooke fears that to attempt to repair the palate may do more harm than good for the patient. He advises his reader, firstly, to consider the general health of the patient particularly whether he may be afflicted with 'scorbutick' [scurvy] or 'other diseases'. But Cooke is primarily concerned that the surgeon should carefully consider whether attempting repair will improve the quality of the patient's life enough to outweigh the potential harm caused by invasive surgery. He directs the reader to consider 'whether it be curable or not i.e. whether the loss of the part of the Lip can be help'd by re-union; otherwise meddle not' (p. 196). He reiterates this amid his actual description of the surgical procedure where he says 'if there be great deformity, consider what to do, lest you make it worse than it was' (p. 196).

Cleft Palate Surgery

Cleft palate surgery lagged significantly behind treatment of the cleft lip; the earliest evidence of surgical treatment of cleft palate dates from 1764 when French dentist, Le Monnier successfully closed a complete cleft palate, which is when the cleft runs from the velum or soft palate to the gums at the front of the mouth.⁴⁰ Le Monnier's technique relied heavily upon cauterising the edges of the cleft allowing the swelling that would naturally occur from such trauma to close the gap. It was not, however, until the early nineteenth century that surgeons Carl Ferdinand von Graefe and Philbert Roux concurrently but independently developed the method for closing clefts of the soft palate that is still used today. Kim relates in her essay that Roux was surprised to find a cleft of the soft palate alone that was congenital and not the result of syphilitic infection. Laura Snell also concludes assertively that the reason congenital cleft palates were not treated was because they were generally believed to be a result of venereal disease.⁴¹ However, as I have shown above and as Pierre-Joseph Desault describes in a late eighteenth century text, this erroneous thesis fails to explain why surgeons might treat a child with a cleft lip and palate, but only operate on the cleft lip.⁴²

³⁹ Cooke, *Mellificium Chirurgiae*, p. 196.

⁴⁰ Kim, 'A Rosebud by any other Name', p. 46.

⁴¹ Laura Snell, 'Cleft Lip and Cleft Palate Repair: Victims of Surgical Indifference?' (2002)

⁴² Pierre Joseph Desault, Parisian Chirurgical Journal (London, 1794), p. 90-3.

Another consideration arises when one considers the way the early-modern body was understood. Mikrokosmographia; A Description of the Body of Man, describes how those parts of the body which are white, pale or colourless are bloodless (p. 57). In describing cleft lip surgery, surgeons often repeat the need to clear away the blood after opening up the edges of a cleft during surgery in order to allow a clear view of where the sutures need to be placed. If this amount of blood is present during cleft lip surgery, the deep pink palate must present an altogether more complicated and daunting type of surgery, especially when it is located directly in front of the windpipe. Returning again to the slightly later text, Parisian Chirurgical Journal, where Desault describes a cleft lip surgery performed in 1790 upon a five year old with a bilateral cleft lip and palate. The writer details how, even though only the cleft lip was sutured, 'the fissure in the arch of the palate is diminished by one-third, and the alveolar arch is perfectly regular⁴³. This suggests therefore that the tightening that takes place in the cleft lip procedure also helps to pull together the cleft palate to afford significant improvement. Modern medical treatment of the cleft palate relies partly on the natural closing of the gap in the palate that arises both from surgery and other methods of strapping the infant's mouth in order to encourage the cleft to close, but ultimately the cleft is operated upon. If surgeons in this period were debating whether or not the cleft lip repair yielded sufficient benefits to vindicate its risks, the altogether more risky palate repair procedure must have been infinitely less justifiable, especially if a noticeable improvement could be made by carrying out the lip repair.

The apparent absence of surgical treatment of cleft palates before the 1800s, and the meagre amount of attention cleft palate receives in other writings before this time, does lead research in a certain direction. Given the difficulty that babies born with cleft palates would face in being able to suckle and feeding in general, it begs the question of how many individuals with clefts manage to survive into adulthood. A number of early-modern texts do state that many infants born with clefts perished as a result of their condition. In *Bartholinus Anatomy*, Thomas Bartholin retells an anecdote told by 'Salmuth' who knew of a boy 'born without any Uvula or Almonds' (tonsils) who 'voided the Milk which he suckt, out of his Nose, and did not live long'.⁴⁴ While this text does not explicitly mention the palate, it is easy to see how an isolated cleft palate could be interpreted as the absence of the uvula at is would entail a small split where the uvula would normally hang down. Also, a text entitled *The*

⁴³ Desault, *Parisian Chirurgical Journal*, p. 96.

⁴⁴ Thomas Bartholin, Bartholinus Anatomy, p. 155.

Commentaries upon the Aphorisms of Dr. Herman Boerhaare published in 1765 by Freiherr Gerard van Swieten states quite casually that, either because the child cannot suckle or because food taken upon a spoon is regurgitated through the nose, 'it is no wonder if many of them die'.⁴⁵ Revealing a potential clue to how babies born with cleft palates managed to survive, Swieten describes how some children manage to survive by 'raising up the back of the tongue, sucking with the tip of the tongue, and with the lips' (p. 349). He also goes on to say that cleft lips are often fixed surgically and, ambiguously, that 'the slit of the vaulted palate is diminished by degrees; and is at least intirely removed' (p. 349). Valerie Fildes explains how early-modern French surgeon Jacques Guillemeau wrote about infants born with cleft palates only surviving for a matter of months due to the milk running from the nose.⁴⁶ Guillemeau describes how he has successfully made and used a false palate that can be placed in the child's mouth only when they are feeding, and urges other 'chirurgeons' to do the same. This text is unusual as generally in early-modern texts which discuss the development of obturators and plates to close gaps in the palate such as Ambroise Paré, the writer explicitly states that such devices are useful to those whose palates are damaged by gunshot or disease and do not mention the possibility of such devices being useful to those with a congenital cleft palate.⁴⁷ It is certainly not outside the realms of possibility that parents, midwives or other people with experience of a child with a cleft may have resourcefully fashioned various sorts of obturator with which to help the child feed, or indeed, to help the adult with a cleft palate speak.

It is difficult to accept the suggestion that individuals born with cleft palates who survived into adulthood were so very rare. British Osteo-archaeologist, Trevor Anderson, published an article detailing the find of one elderly male dating from the twelfth or thirteenth century C. E. who appears to show clear evidence of a unilateral cleft lip and palate.⁴⁸ This was the first British finding of adult remains displaying a cleft lip and palate. In the article, Anderson argues that the smoothness of the cleft in the skull and the absence of any regrowth following trauma negates the possibility that such damage could have been caused by injury or disease. The rare nature of this find is concerning, yet it is solid proof that even being born

⁴⁵ Freiherr Gerard van Swieten, Commentaries upon the Aphorisms of Dr. Herman Boerhaave, p. 349.

⁴⁶ Valerie Fildes, *Breasts, Bottles and Babies*, p. 267.

⁴⁷ 'obturators' OED entry 2a.: *Surg.* and *Dentistry*. A prosthetic device used to close an abnormal opening, esp. in the palate.

⁴⁸ Trevor Anderson, 'Medieval Example of Cleft Lip and Palate from St. Gregory's Priory, Canterbury', Cleft Palate-Craniofacial Journal, 31 (1994).

with what appears to be a complete cleft lip and palate it was not impossible to survive in Medieval England.

Clefts in Literature

The majority of early modern texts which explain the occurrence of clefts by implicating the pregnant mother are mostly interested either in moralising, or in collating stories of interest or 'wonder'. One example is a broadside ballad published in 1568 which describes a child born in Maidstone, Kent. The mother of the child was said to be unmarried and hence 'played the naughty packe'.⁴⁹ Heading the list of the many deformities this child suffered is a description of how he had 'the mouth slitted on the right side like a Lizardes mouth, terrible to beholde'. The message intended by this pamphlet is to let England know that if they continue with their ungodly, immoral ways than they are hardly to be surprised when children are born with disfigurements which render them unable to survive. The pamphlet includes a ballad designed to highlight each of the child's deviations and explain its relevance to the sinners who may read the publication. While the quatrains include references to a number of the child's disabilities, it does seem to fixate on the mouth of the child. The first stanza advices the reader that 'This monstrous shape to thee England / playn shews thy monstrous vice' (1-2). The reader is then expected to 'understand' each part and 'take thereby advice' (3-4). The second stanza uses the 'gaspying mouth' of the infant to illustrate 'what ravine and oppression both / Is used with greedy care' (5-8). According to the third stanza, society's greed is also evident in the infant's 'backe, and gorging paunch' (9). In stanza four, the writer returns to the child's cleft-affected mouth to apportion blame for the disfigurement to those whose 'mouthes they infect, / With lying othes, and slaights: / Blaspheming God, and Prince reject' (13-15). The next stanza tells the reader what else England can understand the cleft to represent:

Their filthy talke, and poisoned speech Disfigures so the mouth That som wold think their stood the breech,⁵⁰ Such filth it breatheth forth.⁵¹

In the illustration of the child on the pamphlet, the cleft appears to be fairly minor in the context of the child's other aberrations, but, as demonstrated, the verse pays a disproportionate amount of attention to the child's facial anomaly. It would be easy to assume

⁴⁹ Anonymous, The Forme and Shape of a Monstrous Child, Borne at Maydstone in Kent (London, 1568), p.1.

⁵⁰ 'breech': OED entry 4a., 'the buttocks, posteriors, rump, seat'.

⁵¹ Anonymous, *The Forme and Shape of a Monstrous Child*, p.1.

that this places the cleft at the centre of the writer's horror upon looking at the child, a position that the reader is invited to share, but the way the cleft is used actually suggests that it is merely used as a convenient metaphor for ill-fashioned verbal behaviour within society.

Another text with similar purpose but without the rhymes, is entitled *A Most Straunge and True Discourse, of the Wonderfull Judgement of God.* This text, published circa 1600, describes itself as 'a notable and most terrible example against Incest and Whoredome' and details the chain of events surrounding the birth of a child in Colwall, Herefordshire.⁵² It contains the story of a young woman who was betrothed to a 'suitable' man but 'such is the lightnesse and inconstancy of a great number of this sexe' she 'fell a lusting' for one of her male cousins (p. 3). She soon became pregnant and gave birth to a child deemed a 'monstrous birth' by the author. He provides a numbered list of the child's deformities of which the third is described as:

The nose was depressed flat to the face, without any nosthrills at all; having at the lower end therof, a rounde button of fleshie substance about the bignes of a nut: on eyther side whereof, somewhat higher then the nose, the upper lippe was slitte or hare-shorne: from which twoo slitts, through the palat or roufe of the mouth, there passed 2 hollowe trenches, each one almost two fingers deepe, even to the gullet or entraunce of the throat.⁵³

This clearly describes a bilateral cleft lip and palate. The infant's other deformities mainly affected the limbs and genitals of the child. The writer describes how the child was baptised and lived for two days and two nights though it was not seen to sleep. It does state however that he 'received sustenance, and had evacuation of naturall superfluities' (p. 7). A child with such severe malformation of the lips and palate could only be fed with much perseverance and patience. Earlier in the text it is stated that once the child was seen to be living it was 'used as a childe ought to be used' but there is no mention of such difficulties (p. 6). The writer concludes by stating his wish that a copy of this pamphlet may fall into the hands of the 'wicked Father and Mother of this monster; to terrifie them withal, till they doe truly repent' (p. 12). These texts are by no means unusual and early modern texts which regale tales of monstrous births have attracted much scholarly attention.⁵⁴ It is noteworthy that while both texts showcase 'monstrous births' to a moralising end, it is not warranted monstrous

⁵² I. R., A Most Straunge and True Discourse, of the Wonderfull Judgement of God (London: Richard Jones, 1600), p. 3.

⁵³ I.R., A Most Straunge and True Discourse, p. 5.

⁵⁴ For example, Peter Platt (ed.), Wonders Marvels and Monsters in Early Modern Culture (Delaware: University of Delaware Press, 2000) and Lorraine Daston and Katherine Park, Wonders and the Order of Nature: 1150 – 1750 (New York: Zone Books, 1998).

enough in itself to justify such attention. It is, however, useful to the writer as a means of drawing attention to sins of the mouth and, in the latter text, to highlight the dangers of conceiving outside of what was considered morally healthy.

One of the more high-profile uses of the cleft lip in literature are the instances in Shakespeare's *Midsummer Night's Dream* and *King Lear*. In Oberon's closing speech of Act five Scene two, he sings in blessing of the three newly married couples, Theseus and Hippolyta, Demetrius and Helena, and Lysander and Hermia. The song, written in couplets, is a jubilant tribute to the beginning of married life when, traditionally, a child may be conceived. The newlyweds, having being blessed by the fairies in their wedding beds, should 'there create' children who 'ever shall be fortunate' (V.2.34-35). Oberon develops this line of thinking with:

So shall all the couples three Ever true in loving be, And the blots of nature's hand Shall not in their issue stand. Never mole, harelip, nor scar, Nor mark prodigious such as are Despisèd in nativity Shall upon their children be.

(V.2.37-44)

The shared quality of each of these 'blots' is that they represent a visible congenital flaw associated with maternal imprinting. The poetry at the close of act 5 scene 1 and continued into scene 2 implies the three sets of potential parents are enveloped in mystical state of perfection and purity. Oberon sings of a desire to prevent any unfortunate events surrounding the conception of any 'issue' which may result in a 'blot' that upsets the prophetic vision of wedded bliss and procreation. The cleft lip seems like a natural choice for Shakespeare here as not only does it have a long held association with being caused by the maternal imagination, as discussed above, but it is also likely to have been a familiar condition with his audience. Of course, it cannot be taken too seriously as an indication of belief in the power of the maternal imagination where the cleft lip is concerned. Not only is *Midsummer Night's Dream* a highly fantastical play, but the close of the play, in particular, revolves around the focal issue of whether the events that took place during the unfolding events were genuine or a dream. At this point, the 'Lovers' have been sent to bed for ''tis almost fairy time' and this short scene leads into Puck's epilogue which recommends to the audience that if they did not

enjoy the play, that they should imagine they have been asleep and that the 'visions' were 'no more yielding but [than] a dream' (Epilogue 4-6). Shakespeare therefore uses the 'harelip' in much the same way as other writers, as a well-recognised example of the supposed powers of the maternal imagination. Here, its mysterious status also blends well with the whimsical nature of the characters and general ambience of the play.

The 'harelip' is used in a similar fashion in *King Lear*.⁵⁵ At this point in the proceedings of the play, Lear is braving the storm on the heath and Kent has failed to persuade him to take shelter. At Lear's command, the Fool has entered the hovel and therein discovered Edgar, disguised as a 'Bedlam beggar' who calls himself Poor Tom. To avoid detection, Edgar goes to great verbal lengths to demonstrate that his mentality is that of a madman and rails against an imaginary 'foul fiend' (III.4.50) which 'hath led [him] through fire and through flame, through ford and whirlpool, o'er bog and quagmire' (III.4.51-52). Prompted by the Fool's poetic introduction of Gloucester entering the stage with a flaming torch, Edgar, keen to develop his persona, delivers an elaborate interpretation of what this 'walking fire' (III.4.102) could represent:

This is the foul fiend Flibbertigibbet. He begins at curfew and walks till the first cock. He gives the web and the pin, squints the eye, and makes the harelip; mildews the white wheat, and hurts the poor creature of the earth.

(III.4.103-106)

Rather than being necessarily a result of maternal imprinting, here the cleft lip, together with defects of the eye, are caused by a kind of mischievous spectral imp. Not only does he meddle with 'the poor creature of the earth' but he also ruins the harvest. Edgar is in hiding from his father due to the actions of his plotting half-brother, Edmund; he is a figure who has lost all control over his life through the inexplicable actions of another. It therefore makes sense that his ramblings should imply a sense of injustice and reckless wrongdoing. Shakespeare portrays the figure of the Flibbertigibbet as a wanton and supernatural villain wreaking damage on innocent victims for his own gratification. Given the defects he chooses to inflict, his main intent is to cause distortion and disfigurement and his motives are beyond explanation. The still-unexplained occurrence of the cleft lip seems a natural choice to evoke this sense of mysterious affliction and misfortune. It also underlines the way in which Edgar

⁵⁵ The passage that concerns this research is faithfully reproduced from the Quarto text, *The History of King Lear* (1608), to the Folio edition, *The Tragedy of King Lear* (1623). For the purposes of this chapter, the 1623 Folio text will be used.

has been marginalised, his character contorted, due to the actions of an individual working behind the scenes to feed their own hunger for power and legacy. Shakespeare's choice of phrasing is also worthy of attention as 'makes the harelip' does not imply violence or the splitting of a lip already formed, but as though the fiend has merely interrupted the formation of its mouth. This makes it clear that, though there is not the implication of the impact of the maternal imagination, that it is a congenital cleft lip that Shakespeare is referring to, albeit one assisted in its formation by a mystical force.

Shakespeare is exceedingly unusual in that he is the only early-modern playwright to make reference to the cleft lip in a literary setting, and he does it twice. This is not to imply that the absence of references to the cleft is of particular note as the same could be said to be true of any number of medical conditions, and is perhaps skewed further by the fact that Shakespeare was so prolific. It is interesting to speculate, though, where Shakespeare gained his sense of mysticism surrounding, and the inexplicable nature of, the formation of the cleft. The implication is that such ideas and superstitions were familiar to an early-modern audience, but that does not necessarily imply that it was accepted as truth or genuine explanation. In both of the scenes from Midsummer Night's Dream and King Lear, Shakespeare is looking to achieve a sense of otherworldliness and magic, and the superstition surrounding the cleft fits well with this theme. Perhaps Shakespeare met, or knew, an individual born with a cleft lip and it was this that prompted him to recall the condition when looking for something to represent a change in appearance or a 'blot of nativity' which would be recognisable by his audience. Conjecture aside, it is also worth noting that while Shakespeare uses the word 'harelip' there is no implication of any direct relationship to the hare itself in the formation of the cleft.

In 1681, Nahum Tate's famous adaptation of *King Lear* was published. According to David Hopkins in the *Oxford Dictionary of National Biography*, it was this version of the play which persisted as 'the standard stage version' into the nineteenth century.⁵⁶ The reason this edition has found its way into this research is because it contains one of the early instances of the corrupt spelling of 'harelip' which is 'hair-lip'. This misspelling also occurs in a text written by Richard Brathwaite in 1665. Brathwaite's text is a commentary upon Chaucer's *The Miller's Tale*. In Brathwaite's text he has just explained that it is very dark and

⁵⁶ 'Nahum Tate (c. 1652 – 1715)', David Hopkins, *ODNB*.

Absolon has asked Alyson to lean out of her window and kiss him.⁵⁷ The lines he includes from the original text are 'This Absolon gan wipe his mouth full drie' and 'Abacke he sterte, and thought it was amis' (p. 48). As is found elsewhere in Brathwaite's text he omits what could be seen as the scandalous part of the text, the kiss itself. However, he cannot resist hinting at what actually took place in the censored text and he does this by including a 'hairlip' reference. He says:

His Experience had inform'd him sufficiently in the knowledge of a Woman's Lip: This had not that smoothness which he expected. Yet (quoth he) I may be deceiv'd. Dame *Alyson* may have an hair-lip, for ought that I know.

(p. 48)

The text in the original, *The Miller's Tale* which has been omitted is:

And at the window she putte hir hole, And Absolon, hym fil no bet ne wers, But with his mouth he kiste her naked ers -Ful savourly- er he wer ware of this⁵⁸ (3732-5)

Rather than detail this turn of events in his commentary, Brathwaite simply says that Dame Alyson 'may have an hair-lip for aught I know' (p. 48). It is tempting to infer from this that Brathwaite is relying upon the fact that people recognise the 'hair-lip' as being another cleft in the body thus representing Dame Alyson's 'ers'.⁵⁹ What is perhaps more likely, assuming this is not merely an error in print which is of course also quite possible, is that this is a simple case of misetymology. Brathwaite has heard the term 'hair-lip' and taken it to mean that a person has an upper lip covered in hair. While there is ambiguity as to the authenticity of this reference and whether it is actually a reference to a cleft lip, this spelling is used in many other texts which unquestionably are related to clefts. This spelling dominates references through the eighteenth century and is often still mistakenly used today.

Conclusion of Chapter Four

Having explored aspects of oral health covering cleanliness, dental pain and disease, the motivation behind this chapter was to investigate the early-modern perceptions that surround

⁵⁷ Richard Brathwaite, A Comment upon the Two Tales (London, 1665), p. 48.

⁵⁸Geoffrey Chaucer, *Canterbury Tales* (London: J. M. Dent, 1979), p. 100

⁵⁹ 'ers': OED etymology of this word is given as 'arse'.

an oral anomaly that is present from birth. By focussing on one particular condition, this chapter could fully survey responses to the birth defect and the development of its treatment. The word cleft in association with what we would now term a cleft lip was not commonly used until the late eighteenth century. In the early-modern period, the term 'harelip' was more commonly used but due to its dubious associations with the hare, it is now deemed offensive by the Oxford English Dictionary. It is still often used in the media, but this is becoming less frequent as society leans further away from media using antiquated terms to describe conditions which have a more modern label. For example, in an brief article published on the BBC News website on 14 October, 2005, a man deemed 'suspicious' was described as being 'black, of thin build, with a long face, a harelip and stubbly hair'.⁶⁰ Further, a piece published on the Daily Mail website, Mail Online, which profiled scholar Thomas Malthus, asserts that 'Thomas Robert Malthus was born with a harelip and is said to have refused to have his portrait painted for many years'.⁶¹

As highlighted in this chapter, it is often assumed in academic work that the maternal imagination was widely accepted as an explanation for the cleft and other medical complications. In relation to the cleft, it is more common to encounter a sceptical reaction to the maternal imagination than an attitude which perpetuates the myth, especially in texts from the field of medicine. Texts which do propagate the impact of maternal imprinting tend to be those interested in mystical or unexplained mysteries, or those which are written to moralise about the causes of birth defects. The exception to this is Jane Sharp's inclusion of the explanation of the harelip in *The Midwives Book* which describes how the child has taken the shape of a hare the mother encountered during pregnancy.⁶² As described within this chapter, Sharp's wisdom here it taken from a Nicholas Culpeper text, and both he and Sharp acknowledge Mizaldus as their source. It is also true that much of Jane Sharp's writing is based on practical hands on experience. This means that it is likely that Sharp will have encountered women who have given birth to children with clefts who could recall an encounter with a hare or like creature during their pregnancy by way of explanation, especially if the idea loitered in public consciousness.

⁶⁰ 'Alarm as man approaches children', in *BBC News*, 14/10/2005

< http://news.bbc.co.uk/1/hi/england/kent/4342634.stm> [accessed 31/07/2012]

⁶¹ Laura Powell, 'Thomas Malthus predicted the end of the world... but the only thing doomed was his own family' in Mail Online, < http://www.dailymail.co.uk/news/article-2057994/Thomas-Malthus-predicted-endworld--thing-doomed-family.html> [accessed 31/07/2012]

² Sharp, *The Midwives Book*, p. 143.

Evidence suggests that cleft lip repair was commonplace. Not only because of the volume of surgical instructions for cleft repair, but also because the 'harelip suture' became a well-known method of stitching which was referred to in a number of other operations across the late seventeenth century. The accessible nature of the cleft lip meant that it could quite quickly and cleanly be surgically opened and re-stitched allowing the two sides of the cleft to knit together in the healing process. It is impossible to imagine the pain of undergoing this procedure without anaesthetic but it is patent that the benefits of having the cleft lip repaired outweighed the amount of distress from the operation. The cleft lip repair would not only leave the patient with a less unusual appearance, but it would improve their speech and the way they could eat and drink. Though there is much protestation in early-modern literature about the falsehood of woman altering their appearance and changing their God-given appearance, there is no evidence of similar reticence when it came to cleft lip repair. This is perhaps down to the physical impairment that a cleft lip could cause meaning that it was not necessarily regarded as a cosmetic procedure.

Cleft palate repair is altogether more complicated than the cleft lip. Looking at cleft palate repair it is easy to draw the conclusion that early-modern surgeons would not operate on it because it would be too bloody, and the patient would be in danger of choking on their own blood. This is complicated by the fact that chapter three of this thesis demonstrates that surgeons may have been willing, and were certainly being advised by French surgical texts, to operate on and cauterise fallen uvulas. It is, of course, true that the uvula is an appendage rather than a membrane and therefore the process of removal would be less complex than the opening up of the edges the fleshy cleft palate and stitching the roof of the mouth together. It is clear that physicians and surgeons were willing to help those who had suffered palate damage which could potentially be a result of venereal disease, so it seems unlikely they would turn away a patient with a cleft palate for that reason. Furthermore, the ulcerated palate that has been eaten by pox would take on a completely different appearance to the neater edges of the congenital cleft palate. It seems more likely that the cleft palate repair was deemed to be too risky. In relation to cleft repairs, surgeons persistently stress the importance of the surgeon weighing up whether the benefits of the surgery are significant enough to justify the distress and potential risks of surgery. In modern day thinking, there is no question that palate surgery enhances the quality of life of the patient and it is routinely performed very early in the infant's life. In the early-modern period, if palate surgery is referenced in a text it is generally on an adult with a cleft palate and there is no evidence of cleft palate surgery being attempted on a baby. Most surgeons argue that clefts cannot be repaired in babies because crying that occurs naturally will hinder the cleft from healing together. The explanation for why cleft palate surgery was not performed was because adults with the defect had adapted to eat, drink and communicate with the gap in their palate and therefore surgery imposed too great a risk for little practical gain.

In initiating research which focuses on a birth defect, it is very common to encounter assumptions from people in the academic field that the study will be led to the field of monstrous births and even witchcraft. It soon became apparent that the cleft lip and palate did not warrant such attention in early-modern writings. The closest example of literature akin to material of this nature is the Broadside Ballad discussed in this chapter and the pamphlet designed to deliver a moralising message based on an apparently incestuous coupling which produced a child with a cleft lip and palate.⁶³ The Broadside Ballad contains, what appears to be, a description of a unilateral cleft lip as part of a long list of infirmities that the infant suffers. The cleft is useful for the purposes of the text as it allows the poet to speak about the abnormal appearance of the child's mouth and how it metaphorically reflects the evil spoken in society. The pamphlet gives great detail about the physical appearance of the child's cleftaffected mouth, but in describing how the child was cared for, it neglects to mention any difficulty in feeding, despite the text clearly describing a palate that is completely cleft.⁶⁴ From the detailed nature of the physical deformity, it seems likely that the writer is writing from a position of having personally encountered a newborn child with a cleft. However, the vague nature of how the child was cared for in the two days that the infant lived suggests that his involvement with the infant was limited. He seizes the opportunity to tell the story of the young couple and their unfortunate child as a way of giving warning to the reader to lead virtuous lives. It seems likely that the infant in the pamphlet was not fictional and therefore the content of his text was dictated to by the reality he described. Although the cleft warrants a fair amount of attention in the verse, it is only one of multiple physical deformities that the child was born with. The cleft in itself does not appear to have been significant enough to warrant such texts when it occurred in isolation. Medical texts portray the cleft lip as though it is an easily solvable problem, and even texts such as Jane Sharp's which contain a section about monstrous births, choose to include clefts in a more neutral chapter related to the

⁶³ Anonymous, *The Forme and Shape of a Monstrous Child, Borne at Maydstone in Kent* (London, 1568), p.1.

⁶⁴ I. R., A Most Straunge and True Discourse, p. 3.

'difficulties of Childbirth'.⁶⁵ It is tempting to infer that the cleft was therefore not necessarily perceived as monstrous, before or after its repair.

It is not unheard of for the cleft lip and palate to make appearance in fictional literary works and there is a wealth of examples across the twentieth century. In the early-modern period, its presence is sparse, but it is high-profile. Shakespeare's inclusion of the 'harelip' in two of his plays poses some interesting questions. Perhaps Shakespeare himself knew somebody with a cleft lip and this is why it lingered in his consciousness in writing his plays. His treatment of the birth defect is hard to find offensive, though it does reintroduce a supernatural element to the creation of the cleft. It is possible that the fact that the cause of the cleft was a mystery meant that it took on the status of something mysterious and strange in public perception. That is not to say that it was genuinely believed to be caused by something supernatural, but that there was a cultural association which connected the randomly occurring cleft with some mischief of nature, just like 'the foul fiend flibbertigibbet' in Shakespeare's King Lear (III.4.10). Even so, the written evidence presented in this chapter suggests that the oral cleft was widely tolerated by earlymodern society. This may be partly to do with the more common nature of facial differences due to diseases which caused facial marring or a deterioration in oral health such as those outlined earlier in the thesis, including syphilis and scurvy, but also small-pox and scarlet fever, and the relative lack of successful treatment for scarring or discoloration. This means society at large would be more acclimatised to seeing such differences than perhaps we are now, in an age with fertile industries of cosmetic surgery and dentistry, as well as treatment available on the NHS. The cleft, present from birth with its clean edges and relatively simple surgical repair, at least for the lip, does not seem to have presented as much of a problem to early- modern sufferers as may have been expected, as long as they managed to survive into adulthood. The real anxiety and need for treatment in relation to oral health seems to be more focussed on those who have suffered a change in condition due to disease or aging. This naturally would warrant more attention as the occurrence of disease would outweigh the incidence of congenital clefts, but where the cleft is discussed it is, generally speaking, not presented as monstrous or even a life-debilitating condition. Living with an unrepaired cleft palate would, of course, prove difficult but in an era where the expectation and the financial need was often that you would first deal with your medical problem yourself, before consulting medical help, individuals would be more likely to

⁶⁵ Sharp, *The Midwives Book*, p. 129.

fashion their own solution, such as a home-made obturator than would perhaps be true today. It is partly for this reason that the cleft occupies such an interesting situation in early-modern culture; though it is a congenital defect, it treads the boundary of personal disability, folkloric belief and surgical attitude towards changing the body. Its study provides an insight into the side of oral health that looks at structural difference in the mouth, rather than its cleanliness or vulnerability later in life.

Thesis Conclusion

One of the driving forces behind this thesis was a desire to set medical sources against more literary sources to see how attitudes and social perceptions carried across genres, and attempt to access a more realistic sense of what cultural expectations surrounded oral health in this period. The four focuses, encompassing hygiene, pain and treatment, disease and birth defect, allowed the field of oral health to be approached from four different viewpoints. Writers who drew attention to the unhealthy state or unattractive appearance of the mouth were often doing so with the sole motivation of providing a concise indicator of a person who was unseemly or of ill-repute. It is the nature of literary material that such cultural associations become exaggerated and exploited, but it is also true that the mouth was upheld as having certain beauty ideals, such as coral lips and pearly-white teeth, by poets and playwrights alike. This means that, in a literary sense, having a damaged palate or loose, missing or black teeth could easily signify characters who needed to appear aged or licentious. This does not necessarily mean that people with poor dentition in early-modern society at large were judged in such fashion any more than they are in today's society. In fact, the more commonplace nature of tooth decay and relative absence of restorative dentistry means that discoloured or missing teeth would be a more commonplace sight and therefore more likely to be accepted. By the same thinking, though dentistry was not in place as a formal profession and there is little evidence to suggest the notion of personal toothbrushes had been introduced to England by the seventeenth-century, it is also true that there exists a wealth of material advising people in this period to keep their teeth clean by washing daily either with a piece of linen on their finger or mouthwashes. Further, they were given a reason to keep their teeth clean and as many writers explained that this improved likelihood of retaining one's own teeth, which would be great motivation in an age where provision of false teeth was unreliable at best.

This research mainly focuses on the teeth and the palate as, though there are good academic sources on the teeth in this period, few make use of both medical and literary sources, and work on the palate is very sparse. The thesis does not deal directly with the health of tongue, because representations of the tongue across medical and literary material have already attracted a notable amount of academic attention, not least in Carla Mazzio's exemplary chapter 'Sins of the Tongue' contained in *The Body in Parts:*

*Fantasies of Corporeality in Early Modern Europe.*¹ It is the case that, due to its nature as a muscle, the tongue does not warrant the same amount of attention as the teeth and the palate in terms of what can be done to practically improve its physical condition; discussion of improving the tongue more often than not strays into metaphorical advice on improving one's character and demeanour which could not be given full justice as a part of a thesis which was not directly concerned with this aspect of oral history. Similarly, this thesis explores the palate from a surgical point of view, but there is an abundance of material in early-modern literature related to the palate and its significance both in biblical and rhetorical texts, and its role, as it was understood, in the sense of taste. To retain its focus on oral health, this research dealt solely with health concerns that caused physical or visible deviation, which could usually be treated.

While dental historians and literary historians have written at length about the teeth in this period, the palate has been largely overlooked. It is often mentioned in texts which deal with the symptoms of venereal disease and the outcomes of treatment with mercury, but largely the palate is taken for granted in its essential role. Chapter three is by no means a comprehensive view of what the palate signified in this period, indeed there is a thesis itself in that matter, but it draws attention to how the palate's function was understood, and action that could be taken if it became unhealthy. The cleft lip and palate is largely neglected in terms of academic study. Medical historian, Sharon Kim, produced the most useful resource on this subject and her article provides the most comprehensive history of the international development of cleft surgery, as referred to in Chapter Four.² The main benefit of studying the cleft lip and palate is not necessarily the discovery of cultural perceptions about the condition itself, but what it tells us about the way in which early-modern surgeons and writers approached the tricky subject of a congenital birth defect which could be remedied surgically. The perceptions of the cleft lip begin to change as time progress into the eighteenth-century and writers seem to take more aesthetic affront to the condition. This underlines the seemingly more tolerant view of those writing about the condition in the early-modern period.

This thesis builds upon existing works which are interested in various aspects of oral health, and its contribution to the field is partly to highlight the value of analysing

¹ David Hillman, Carla Mazzio (eds.), *The Body in Parts: Fantasies of Corporeality in Early Modern Europe* (London: Routledge, 1997), pp. 53-79.

² Sharon Kim, 'A Rosebud by any Other Name: The History of Cleft Lip and Palate Repair', *Proceedings of the* 9th Annual History of Medicine Days, (2000)

specific aspects of medical history by comparing material from both medical, literary and other fields to give the best possible chance of getting close to the reality of what the experience of suffering with a particular problem was like in the early-modern period. All materials need to be treated sensitively with an awareness of genre, but ultimately with a limited amount of material available due to the burgeoning nature of the early-modern publishing industry, it is essential to assimilate evidence as far as possible in order to give the clearest picture. It may well be true that oral hygiene was not at the standard which we, as a society, hold today, but the most valuable parts of exploring the history of oral health are those which suggest that there was advice being given from the field of medicine and beauty ideals being upheld in literature that challenge the overall sense of negligence surrounding hygiene and the mouth.

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