
The relationship between sound and content in Latin poetry

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Abstract

This dissertation examines the relationship between phonetic sound and content in Latin poetry, with a focus on Books 1–3 of Horace’s *Odes*. The central argument is that a relationship exists between sound and content in poetry, that this can be analysed and described more thoroughly and systematically than is usually the case, and that the appreciation of poetry can be enhanced by doing so.

Part 1 presents a scheme for describing the sound-content relationship, and argues that this accurately reflects the perceptions of poetic audiences and is psychologically valid. The scheme begins with the concept of the ‘sonance’, defined as any set of sounds that renders a passage sonically noteworthy. Sonances that relate to content are classified either as ‘harmonic sonances’, which relate to content due to the properties of the relevant sounds, or ‘repetitive sonances’, which relate to content purely due to the repetition (including patterning or contrasting) of sounds, regardless of their properties. Harmonic sonances, it is argued, may relate to content through four ‘harmonies’, depending on whether acoustic or articulatory properties are involved and whether the relationship is one of similarity between property and content or a more distant ‘metaphor’. Repetitive sonances may relate to content by several different means, or ‘modes of repetition’.

Part 2 presents a simple method of numerical analysis which may be applied to the text by computer to extract passages that are relatively likely to contain a sonance, and briefly discusses the process of assessing these results, identifying further sonances by more natural means, and relating each sonance to the relevant content. As an essential preliminary to such matters, Latin phonetics and phonology are also discussed in detail.

Parts 3 and 4 present the results of applying these resources of assessment and description to the text, to demonstrate the type of poetic appreciation which may thus be gained. Part 3 consists of two catalogues of harmonic and repetitive sonances taken from the whole of *Odes* 1–3. Part 4 is a specific examination of two entire odes in much greater detail.

Declaration

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy of my thesis, when deposited in the University Library, being available for loan and photocopying.

Matthew Williams

Date

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Preliminary matters

I have used the Oxford Classical Text editions of Horace and Vergil, and the Loeb Classical Library editions of ancient theoretical writings on literature. In most other cases, where a passage has been brought to my attention by a secondary source, I reproduce the text provided there (with an appropriate reference). Appendix 2 contains specific comments on the text of Horace used.

Abbreviations follow those used in the *Oxford Classical Dictionary* (Hornblower and Spawforth 1996), except that I use ‘H.’ for Horace, ‘C.’ for his *Odes*, and ‘V.’ for Vergil.

Phonetic symbols follow the International Phonetic Alphabet (see e.g. Laver 1994: 593).

All gender-positive language is the fault of my sources.

The following typefaces and symbols are used to highlight sonic features:

tectum	major sounds
tectum	minor sounds
~a	vowel-initial alliteration
i ^ a	hiatus between words
i^a	hiatus within a word
tectu _m	weak final <i>m</i> ; nasalisation and lengthening of preceding vowel
tect _{um}	elision

Introduction

Is there a relationship between the sound of words and their meaning? This question was raised at least as long ago as Plato's *Cratylus*, sparking a debate that lasted more than two millennia until it was extinguished by the authoritative answer of twentieth-century linguistics: in general, the sound of a word is arbitrary, meaningless. This general proposition is now widely accepted in the context of the ordinary use of language. Poetry, however, has always been an extraordinary use of language, and in this special context the debate rages on.

The spectrum of opinions expressed in this debate may be reduced, without significant distortion, to a division between the 'believers', who argue that the sound of poetry has some relation to its content, and the 'sceptics', who deny any such relationship or accept only a version enervated by qualifications. These labels are quite appropriate, for the position a person takes on this issue is usually very much a matter of faith. Such a basis is never conducive to genuine debate, and it has here the unfortunate consequences one would expect. Firstly, both sides are reluctant to seriously consider the other's arguments and to acknowledge that a compromise may be possible; in particular, it seems that many sceptics will not accept from the believers anything less than absolute proof of their position. Secondly, contributions to the debate are often of a low quality: many believers simply voice self-indulgent impressions in a haphazard manner, apparently ignorant of the need for evidence and argument; many sceptics respond with manipulative arguments or mere disparagement. Thus, a large part of the dispute is due not to actual disagreement but to miscommunication and misunderstanding; as Hrushovski (1980: 45) says, "many controversies on this issue are pseudoquarrels".

Given the influence of faith in this debate, it is appropriate to state at once that I am a believer. However, this dissertation is by no means an attempt to resolve the debate in favour of the believers, that is, to prove the existence of a relationship between sound and content. One would be very brave to pursue a goal which has eluded scholars for so long,

and braver still to claim its fulfilment. This is not to say that the goal is unachievable: modern developments in linguistics and psychology may well provide the means for such proof. However, I have no expertise in these fields and, in any case, am more interested in matters of practical relevance to readers of poetry than in a purely theoretical question. My aims, therefore, are more modest: I wish to present an extensive and systematic scheme for describing the relationship between sound and content in poetry, to provide suitable justification for this scheme, to develop more objective methods for assessing the sonic properties of poetry, and to demonstrate the type of poetic appreciation which may arise when these methods and this scheme are implemented. In short, I wish to substantially contribute to the case for belief in the relationship between sound and content in poetry, and to provide the practical tools and theoretical conviction necessary to appreciate it.

To my mind, any study that seeks to make a genuine, positive contribution to this debate must begin with an attempt to dispel some of the confusion that surrounds it. This introduction therefore contains two preliminary discussions in response to the two problems identified above. Firstly, I discuss the extent to which the believers can reasonably be expected to support their case (0.4 a).¹ Secondly, I suggest that several basic linguistic concepts sometimes thought to invalidate the believers' case, and therefore often invoked by sceptics, are in fact not incompatible with the view that I propose (0.4 b). Consideration of some of the other dubious arguments used by sceptics is deferred until a later stage when I have fully presented my proposal (1.8); however, except for providing a few examples to put the sceptics' complaints in their proper context (1.8), I do not give the same consideration to the rather imaginative contributions of certain believers, since I place no reliance on these.

In this introduction I also discuss my choice of subject matter (0.1), introduce some fundamental concepts and terminology (0.2), provide an overview of the dissertation (0.3) and, finally, comment briefly on the scope of this study and its relation to the broader context (0.5).

¹ The operation of my numbering system may be explained by an example: 1.2 a.3 refers to part 1, chapter 2, section a, subsection 3. For consistency, this introduction is regarded as Part 0.

0.1

Subject matter

This is not a purely theoretical study of the sound-content relationship as an abstract notion. Clearly, my focus on poetry and my aim of producing practical results require the study to engage with real poetic material. This could comprise a broad range of poetry in a number of languages, but my view is that a narrower subject matter will give the study much greater force and practical value. Thus, I focus on poetry in Latin, specifically on Horace, and more specifically on the first three books of his *Odes*. This choice of subject matter is ultimately due to personal preference and cannot be absolutely justified. Nevertheless, the benefits offered by each of these three reductions in focus should be mentioned.

An important factor is the role played in this study by methods of numerical analysis (2.3). Given the nearly one-to-one correspondence between its letters and the sounds they represent, Latin may be represented phonemically (that is, with an exact one-to-one correspondence) and thus analysed by computer much more readily than a language such as English and even languages such as French whose spelling is more regular but still far from phonemic. Horace's *Odes* are particularly amenable to the type of numerical analysis I wish to perform. In order to combine and compare their statistics, it is important that different passages be similar in length. At a small scale, all Latin poets divide their compositions into lines of similar lengths. Only Horace in his *Odes*, however, facilitates worthwhile numerical analysis at a medium scale by roughly arranging his thought into units, namely four-line stanzas, which are significantly longer than individual lines yet sufficiently short to enable meaningful numerical comparison among them (the elegiac couplets of other poets are too close in length to individual lines to merit consideration of both lines and couplets); other poems that are not arranged in stanzas could, of course, be similarly divided, but automatic divisions at regular intervals would bear no relation to the developments in content, and a manual arrangement that took content into account would be extremely arduous. Horace also enables analysis at the larger but still manageable scale of the short poem (as, for example, do Catullus and Propertius), but the sound-content relationship is problematic at such a scale and this dissertation does not include my investigations in this area.

On a more theoretical level, although it would not be unreasonable to study the use of sound by a poet who had no interest in sound and who wrote in a tradition in which sound was not considered important, it is clearly more appropriate and satisfying to study a poet for whom and a tradition in which sound was very relevant. The importance of sound in Latin literature is shown, for example, by the writings of Cicero and Quintilian (1.9 c), and, more importantly in the poetic context, by the strong tradition of alliteration particularly in pre-classical Latin poetry. Horace himself was perhaps more interested than any other Latin poet in matters of form and technique, and it is reasonable to assume that this interest extended to the use of sound (1.9 b); the *Odes* are, of course, Horace's most technically accomplished work.

Despite this interest in form, it is an advantage of the *Odes* (and, in fact, one of the main factors governing my decision to study them) that Horace's use of sound, though frequent and effective, is generally restrained and subtle. In earlier poets such as Lucretius and Catullus, and even in Vergil, alliteration is used heavily and seemingly habitually, so that many instances simply cannot be said to relate to content and it is therefore difficult to determine which instances should be related to content and difficult to argue in favour of such selective treatment. A study of the *Odes* suffers far less from the confusing effects of such 'background noise'.

Finally, the relationship between sound and content can be studied more readily where variations in both features occur at roughly the same scale. For example, it may be difficult to analyse a passage which contains several distinct uses of sound without a significant change in content. Since sonic devices generally operate at the scale of a few lines, the ideal text would display a similarly high density of variation in content. This is unlikely to be the case with a narrative poem such as the *Aeneid* or a didactic poem such as *De Rerum Natura*. Even the shorter poems of poets such as Catullus and Propertius are, I feel, less suitable in this regard. The *Odes*, however, even though several broad themes recur many times, generally display significant variation in mood and other aspects of content within each poem.

I have several reasons for choosing Books 1–3 of the *Odes*. Since the three books were published together, they may be sensibly regarded as a single text and, more importantly, they are likely to be relatively consistent in their use of sound; inclusion of the fourth book, published separately some years later, could distort this coherent picture. At almost 2500

lines, the three books are suitably long to give my results statistical and literary validity: a single book would be too short, and there is no need to extend the sample by including the fourth book.

Despite the advantages offered by my choice of subject matter, it is very important to note that the validity of my study is not necessarily restricted to the *Odes*, to Horace, or even to the Latin language. Much of the theoretical basis of the study is not based on any particular language or involves languages other than Latin. Much of the practical evidence is provided by other Latin poets or poets in other languages. The practical application is primarily illustrative, and, in so far as it is relevant to the validity of the study, could readily be replaced by an application to other poems. Thus, since their basis is broad, the principles developed in this study should likewise be capable of broad application. There is no reason why they should not be directly applicable to other Latin poetry, even though practical difficulties may be encountered in the case of texts that lack some of the advantages discussed above. I am also confident that the same principles may be applied, with any necessary minor adjustments, to poetry in Ancient Greek, English and other European languages. Many of these principles should also be applicable to other branches of literature, particularly rhetoric.² In short, I like to regard the *Odes* and the Latin language essentially as test subjects in an experiment of much greater significance.

Of course, these claims, and my use of non-Latin evidence, depend in part on the assumption that the Latin language and its literature share certain features with other languages and their literature. I will not attempt to verify this assumption, being content to rely on the fact that responses to poetry display many similarities regardless of the language of the poem and the native language of the reader, and the fact that there is undoubtedly a broad linguistic and literary tradition common to many European languages. However, I do not claim universal validity for my results, aware that the languages and literatures of other cultures differ enormously from those considered here; nevertheless, given that many linguistic and psychological processes are common to all people, I would not be surprised if a large portion of this study did have relevance even to such cultures.

² For the use of sound and repetition in ancient rhetoric see, for example, Denniston (1952: 78–98, 124–38).

0.2

Fundamental concepts

It will be convenient to introduce here several concepts and terms fundamental to a discussion of sound in poetry: ‘articulatory’, ‘acoustic’ and ‘auditory’ properties, and ‘phonemes’ and ‘allophones’. It is also necessary to establish exactly what I mean by the key terms ‘sound’ and ‘content’, to explain my use of ‘relationship’ and ‘correspondence’ instead of more common terms, and to discuss whether this study depends on any particular manner of reading the poetry.

a. Aspects of sound

The study of the sound of language may be conveniently divided into three levels (O’Connor 1973: 16–17). On the articulatory level we study the physiological movements of the vocal apparatus that are used to produce speech-sounds. On the acoustic level we study the physical signals, or sound waves, which are created by these movements and which transmit the speech-sounds. The perception of these signals through the sense of hearing is studied on the auditory level. A sound may be described on any of these levels: it has articulatory properties such as the presence or absence of voicing, the place of articulation and the manner of articulation, acoustic properties such as periodicity, intensity and a distribution of frequencies, and auditory properties such as loudness, pitch and quality.

As speakers and listeners we have direct access only to the articulatory and auditory levels of sound, since we access the acoustic level only indirectly by means of the auditory mechanism. Technically, then, it is these levels that a study of poetic sound should consider. However, since it is necessary to investigate the auditory level by means of experimental psychology, auditory properties are not perfectly understood and are difficult to measure and discuss; acoustic properties, on the other hand, which roughly correspond to auditory properties, are easily and accurately measurable by means of experimental physics. Therefore, for the sake of convenience, it is common to assume a complete correspondence between the acoustic and auditory levels, and thus to focus on the former while remaining ultimately interested in the latter. The approximations involved in this assumption are discussed in 2.2 e.1.

b. Phonemes and allophones

The sounds of a particular accent are subject to a great deal of variation, both among different speakers and in the speech of individuals. Most of these variations are ignored as meaningless. Those variations that are meaningful in that accent, that is, those that are able to change the meaning of a word, are said to be phonemic (alternatively, distinctive or contrastive), and two sounds thus distinguished are said to belong to different phonemes of that accent. A phoneme is thus an abstract group of sounds which, for the purposes of a particular accent, are effectively the same, in that they can be exchanged for one another without altering the meaning of a word. For example, in standard English, the phoneme /p/³ includes all the different ways of pronouncing the *p* in ‘pit’ such that the word continues to be ‘pit’; but /p/ and /b/ are different phonemes in English because ‘pit’ and ‘bit’ are different words.

Variations among the members of a phoneme are not entirely random: some variations occur systematically depending upon the context of the phoneme. For example, in standard English the instances of /p/ in ‘pot’ and ‘spot’ differ systematically in that, generally, the first is an aspirated [p^h],⁴ and the second an unaspirated [p]. However, this difference is not distinctive in English since it cannot change the meaning of a word (as it can in Greek, for example). Sounds which thus differ from one another systematically but not distinctively are known as allophones of a phoneme. Since two instances of a single allophone are highly likely to differ in some regard, the concept of an allophone with constant, defined properties is as abstract as that of a phoneme.⁵

It is important to note, and I have therefore stressed the point, that phonemes and allophones must be discussed in the context of a specified accent of a particular language: a difference that is phonemic in one accent may be merely allophonic in another language or even in another accent of the same language. Throughout this study, in the absence of any indication to the contrary, the context of classical Latin is to be assumed for any reference to phonemes or allophones.

³ Phonemes are transcribed within oblique lines (e.g. /p/). Square brackets (e.g. [p]) indicate a phonetic transcription, which is used to give greater phonetic detail, especially when transcribing allophones, and to refer to speech-sounds purely as physical sounds independently of their role in any language. For the sake of simplicity, I generally use obliques whenever possible, even when referring to the acoustic and articulatory properties of a Latin sound (see the last paragraph of this section).

⁴ See note 3.

⁵ For further discussion of phonemes and allophones see, for example, Sommerstein (1977: 2–3), Crystal (1987: 160–1), and Laver (1994: 41–2).

For the sake of convenience, it is common to say that phonemes and allophones have certain sonic (i.e. articulatory, acoustic or auditory) properties; for example, we say that the English phoneme /p/ is a voiceless bilabial stop, and that the English allophone [p^h] is a voiceless aspirated bilabial stop. Technically, however, since phonemes and allophones are merely abstract concepts, they do not have such properties in themselves but only when they are actually realised as individual sounds of speech. Moreover, since the realisations of a phoneme or allophone differ from one another in terms of their specific properties, any statement of the properties of a phoneme or allophone is necessarily incomplete and unspecific. For example, since the realisations of the English phoneme /p/ may or may not be aspirated, a description of the phoneme should not refer to the property of aspiration; similarly, since the realisations of /s/ differ in terms of their average frequency, a description of the phoneme should refer only to a range of frequencies rather than to a precise value. Thus, whenever we say that a phoneme or allophone has certain sonic properties, we in fact mean that each of its standard realisations will demonstrate similar properties (in addition to other unspecified properties).

c. Sound and content

A study of the relationship between sound and content in poetry cannot proceed without some comment on the meanings ascribed to the terms ‘sound’ and ‘content’, each of which carries a number of meanings in both popular and technical usage.

By ‘sound’ I refer to phonemes and allophones and to the acoustic and articulatory properties with which they are regularly realised. This usage is perhaps best clarified by stating some of the meanings it excludes. Firstly, I do not refer to any features that are not encoded in the text but are introduced only in individual performances or realisations of the text; this includes variations in the speed, volume and pitch (fundamental frequency; 2.2 e.1) of the performance. In other words, the sound that I consider is an abstract combination of features that are common to all accurate realisations of the text.

More importantly, in using the term ‘sound’ I make no reference to metre or rhythm, which many writers on poetic sound regard as an important, if not the sole, meaning of the term; for example, when Pope advises in his *Essay on Criticism* (365) that “the sound must seem an echo to the sense”, it is primarily to metre that he refers (as shown by his illustrations).

It is true that metre can relate to content,⁶ that effects of metre are very often confused with those of phonetic sound, and that metre and phonetic sound often cooperate in successful poems. However, metre and phonetic sound are distinct features of poetry (except for the fact that metre is based on phonetic variations), as are their respective relationships with content. Any insistence upon a closer relationship is due, I think, to a confusion of the various meanings of the word ‘sound’: metre is part of the overall ‘sound’ of a poem, or part of the way the poem ‘sounds’, and is therefore confused with the poem’s individual phonetic ‘sounds’. It would certainly be reasonable to study metre and phonetic sound together as related aspects of a broader field, but I have chosen simply to focus on the latter and ignore the former.

The term ‘content’ is much more difficult to define, but is probably subject to less confusion: a relatively vague description will therefore suffice. In this study, ‘content’ refers to any aspect of a poem that is not an aspect of its form; it embraces the related terms ‘substance’ and ‘meaning’. The term thus includes any object or action described, any concept, theme or motif, and any tone or mood, whether denoted or connoted. It excludes such aspects as metre, word order and diction, although these may give rise to ideas or meanings that become part of the poem’s content. However, in order to acknowledge the important relationship between sound and aspects such as opening, closure and unity, I include within the range of ‘content’ any aspect of the poem’s structure, even though structure is, of course, an aspect not of content but of form (1.4 d.1).

d. ‘Relationship’ and similar terms

A large number of terms have been used to refer to a non-arbitrary connection between linguistic sound and meaning: ‘sound symbolism’, ‘synaesthesia’, ‘onomatopoeia’, ‘expressiveness’, and so on. I do not use any of these terms for several reasons. In the first place, no term has been accepted as standard or could even be said to be the most commonly used. Most of the terms do not have a fixed meaning but are used in a variety of ways by different commentators: it would be unwise to import such uncertainty or confusion unnecessarily. In fact, some terms, such as ‘symbolism’ and ‘expressiveness’, contain assertions about the nature of the connection which I and many others regard as incorrect, making them clearly inappropriate for my purposes. Most importantly, none of

⁶ See, for example, Attridge’s (1995: 11–19) ‘functions of rhythm in poetry’, which bear a striking resemblance to my ‘modes of repetition’ (1.4, with further references to this work).

the terms mentioned embraces all of the matters which I investigate; in particular, most are limited to connections involving the specific nature of the sounds involved, and exclude connections based on the mere repetition of sound.

Thus, I prefer to use the terms ‘relationship’ and ‘correspondence’. I will not ascribe any technical meaning to these terms, or even provide specific definitions, which would be restrictive and potentially confusing: the words should be understood to bear their normal meanings, which are sufficiently clear to remain unstated. For my purposes, the terms are largely synonymous and often interchangeable. One subtle distinction, which justifies the use of two terms, is that ‘relationship’ refers to the general concept of a connection (between sound and content) whereas ‘correspondence’ refers to a more specific phenomenon demonstrated by that connection, or to a particular occurrence of that phenomenon. Both terms are deliberately and, I think, suitably vague, enabling them to be moulded to my purposes. ‘Correspondence’, it is true, hints at my view of the nature of the connection, but this can generally be ignored. ‘Relationship’ is entirely unspecific, and is therefore suitable in contexts where any reference to the nature of the connection would be unwelcome, such as in the title of the dissertation.

e. Reading poetry

It is necessary to discuss whether this study makes any assumptions as to the manner in which poetic sound is perceived. There are three possibilities: the audience may read the text silently, hear it recited by another, or read aloud for its own ears. The audience has a real perception in the first case of neither acoustic nor articulatory properties (provided the words are not mouthed), in the second case of acoustic properties only, and only in the third case of both types of property. However, there is a view that even a passive listener may refer to the vocal articulations that produced the sounds perceived (the ‘motor theory’ of speech perception; see Crystal 1987: 148), and it is quite common for a silent reader at least partially to mouth the words as they are read. Moreover, I believe that a silent reader, if attempting to appreciate the sound of the text, may readily recall a mental version of the acoustic properties (and, if necessary, the articulatory properties also) which is capable of being felt to relate to content. Thus, I do not believe that any particular manner of reading is necessary to provide the perceptions required by this study, although a person reading aloud will clearly have the strongest perceptions. To attempt to validate this belief would be an unnecessary diversion: I therefore ask any critic who disagrees simply to regard the

validity of my results as limited to the case of a person reading aloud; appropriately, this is probably the manner in which most of Horace's contemporary audience encountered the text (another complex question which I will not pursue here; see, for example, Knox 1968).

0.3

Overview

This chapter is a brief overview of the broad structure and some of the fundamental concepts of the dissertation. Further discussions are provided in the introduction to each of the four parts that constitute the body of the dissertation.

In the first part, 'theoretical aspects', I develop and attempt to justify an extensive and systematic scheme for describing the relationship between sound and content. This scheme begins with the concept of the 'sonance', which I define as any set of sounds that renders a passage sonically noteworthy (1.2). Sonances that relate to content may be classified either as 'harmonic sonances', which relate to content due to the properties of the relevant sounds, or as 'repetitive sonances', which relate to content purely due to the repetition (including patterning or contrasting) of sounds, regardless of their properties. Repetitive sonances may, I argue, enter into several general categories of relationship with content, which I call the 'modes of repetition' (1.4). For example, a sonic link between two or more passages may relate to a connection in meaning among the passages; I call this category the 'associative mode of repetition'. Through each of these modes, repetitive sonances may relate to numerous more specific aspects of content. Similarly, harmonic sonances may, I argue, relate to content through four 'harmonies', depending on whether the acoustic or the articulatory properties of the sounds are involved and whether the relationship is one of similarity between property and content or a more distant 'metaphor' (1.5). Through these harmonies, each sound has the ability, or 'harmonic potential', to relate to numerous aspects of content. Having presented this scheme, I argue that it embraces traditional concepts such as onomatopoeia and euphony (1.3), and improves upon several schemes developed by other commentators (1.7).

The second part, ‘practical aspects’, deals with the process of assessing the sonic properties of poetry and identifying noteworthy sets of sounds, or sonances. In pursuit of my aim to improve the objectivity of this process, I propose a simple method of numerical analysis which may be applied to the text by computer to extract passages that are relatively likely to contain a sonance (2.3). I then briefly discuss the remainder of the process, which involves assessing the results of numerical analysis, identifying by more natural means other passages which escaped detection, and attempting to relate each sonance to the relevant content (2.4). Of course, in order to analyse and appreciate the sounds of Latin poetry, it is necessary to know what sounds are represented by the Latin text: to this end, I discuss the well-known facts of Latin pronunciation, as well as the more detailed acoustic and articulatory properties of the sounds and the assumptions that must be made in order to convert less certain areas into the concrete data required for numerical analysis (2.2).

The third part, ‘general application’, demonstrates the application of the scheme and process above to the subject text, *Odes* 1–3. The majority of this part consists of two catalogues of examples, one of harmonic sonances (3.2) and one of repetitive sonances (3.3). Each section of the harmonic catalogue is devoted to a specific sound or group of sounds, and begins with an argument that the sound or group has, due to the properties it has been shown in Part 2 to possess, a number of potentials to harmonise with various aspects of content. Since this is probably the most controversial, and interesting, area of my study, the harmonic catalogue occupies a large portion of the dissertation. The repetitive catalogue presents examples of sonances in each of the modes of repetition, organised according to the specific aspects of content involved. Neither catalogue is exhaustive, but both are sufficiently extensive to demonstrate the operation of my scheme and to provide a clear picture of the role of the sound-content relationship in the *Odes*.

The fourth and final part, ‘specific application’, consists of two ‘sonic readings’, detailed examinations of Horace’s use of sound in two complete odes. These readings are essentially illustrative, but they do more than merely display examples from the catalogues in their proper context: they also show how examples may interact so that developments in content are paralleled by developments in sound, and provide an example of larger scale sound-content correspondence involving the broader theme and subtext of a poem. More importantly, this part is the ultimate demonstration of the type of poetic appreciation that may be gained through acceptance of the sound-content relationship and application of the tools developed in this study.

0.4

Clarifying the debate

This chapter is a brief attempt to dispel some of the confusion surrounding the debate, as mentioned earlier. The first section considers the concept of proof, challenging its strict application in these circumstances. In the second section I acknowledge some fundamental linguistic concepts and propose that my study is not incompatible with them. My treatment of these issues is by no means comprehensive: my hope is simply to avert some of the obvious theoretical criticisms that many sceptics would immediately raise against such a study, and thus to remove, or at least weaken, some of the major justifications for scepticism.

a. Proof, reasonableness and complexity

I have stated above that I do not aim to prove the existence of the sound-content relationship. It is necessary, therefore, to deal with the argument, sometimes made or assumed by sceptics, that the failure of believers to prove their case amounts to victory for their opponents. This argument is based on two assumptions. Firstly, it assumes that the onus of establishing a case lies on the believers, in other words, that if neither side establishes a case one must conclude that there is no sound-content relationship. In response, the believers might claim that the question is not susceptible to such an absolute approach, that it is, for example, a matter of opinion; however, this is an unenlightening response and is clearly inappropriate in an academic study. Alternatively, the believers might argue that the abundance of evidence provided by audiences of poetry over many centuries gives rise to a presumption in favour of the relationship, the onus of disproving which must lie on the sceptics. This is a powerful point, but it is not conclusive and does not apply to every aspect of the believers' case: to avoid reliance on this argument, I am prepared to accept that the believers do bear the onus of establishing their case.

More importantly, the sceptics' argument assumes that establishment of the believers' case requires nothing less than absolute proof. It is this unreasonable expectation that I wish to challenge here. In the first place, it is important to note that proof is not possible or even a relevant concept in relation to some of the questions that arise.⁷ Of course, this does not

⁷ Cf. Melhem (1973: 214): "The expectation of more than relative perfection with regard to any subjective data is somewhat chimerical."

mean that the sceptics are obliged to accept an idea simply because its truth has been demonstrated to the highest degree that happens to be possible: it may be that no possible demonstration is sufficient to make rejection of the idea unreasonable. However, the impossibility of proof does suggest that sceptics should be prepared to accept a degree of support that falls short of absolute proof. In fact, even where proof may be possible, it may still be unreasonable to deny all value to any lesser form of support. In general, there is no reason why questions of sound-content correspondence should be subjected to higher standards of proof than any other literary question: I therefore suggest that a substantial degree of support should be accepted as the basis for a substantial degree of acceptance.

The issue of proof is relevant to both my theoretical scheme and its practical application, and, more specifically, to two different types of claims at each of these levels. At the theoretical level I claim firstly that my scheme is an accurate description of the perceptions of a poetic audience, and secondly that these perceptions accurately reflect the real psychological experience. At the practical level I make numerous claims of the nature firstly that a certain set of sounds is ‘noteworthy’, and secondly that a particular description applies to the relationship between such sounds and the content of the relevant passage. Each of these four claims is considered below.

Firstly, then, there is the claim that the scheme accurately describes the perceptions of the relevant audience, and is not merely an attractive fiction. Once we have agreed upon the constitution of ‘the relevant audience’ (1.9), this claim is clearly amenable to proof in the form of evidence of those perceptions. To this end, I accompany my discussion of each element of the scheme with evidence that audiences have indeed responded to poetry in that particular manner (1.2, 1.4 and 1.5; also see 1.9 c). The quality and quantity of the available evidence obviously varies from element to element, but in general I believe that this claim is sufficiently substantiated.

Secondly, there is the claim that the audience’s perceptions are correct, in the sense that they are not merely an illusion or fantasy but truly reflect the psychological phenomena that actually took place. The problem here, of course, is that these phenomena are generally manifested only in the form of the very perceptions with which we want to compare them. The best approach, therefore, probably involves considering whether the audience’s perceptions are consistent with and explained by what is known about the psychological and linguistic processes that operate in the literary experience. As I have

said, such an approach may be able to provide real proof of this claim. However, since I have no expertise in these areas, and since in any case I believe that such complicated and esoteric discussions are unlikely to convince many sceptics (1.6 c), I aim instead to provide a substantial degree of support for the claim by other means.

My basic argument is that, in the absence of conclusive proof, sceptics and believers alike should accept the most reasonable explanation available for the audience's perceptions. If the most reasonable explanation is that these perceptions are mere illusions, then even the believers should accept this. However, if a more reasonable explanation can be provided, the sceptics should accept this, at least provisionally, and abandon the illusion argument. Thus, my aim is to provide a reasonable, and preferably simple, theory that successfully explains the audience's perceptions without contradicting any other observations, facts or important beliefs. As it happens, the theory that I propose (1.6) is informed by some recent psychological approaches to the issue; moreover, it avoids what I regard as some less convincing psychological explanations in favour of more accessible suggestions. Thus, even though a higher degree of support is probably available, I believe that my argument is sufficient to substantiate the claim that the audience's perceptions do indeed reflect the underlying reality.

Thirdly, the issue of proof arises in relation to claims of the type that a certain set of sounds is 'noteworthy' (that is, constitutes a 'sonance'). This is one of the contexts in which proof becomes not only practically impossible but conceptually irrelevant, since a requirement of proof assumes that there is an objective realm in which the sounds in question either are or are not noteworthy: in reality, of course, there is not a distinct line between these two states but a continuous scale, including states in which characterisation of the sounds will be a matter of judgement and opinion; it would be meaningless to divide this continuum in two. We must talk, then, not in terms of proof and clear distinctions but in terms of a scale of probabilities: 'noteworthy' must be taken to mean 'likely to be noted'. My aim, therefore, is simply to develop a test which can show that a set of sounds is quite likely to be noted. The numerical analysis suggested (2.3) is, I believe, sufficiently valid in theoretical terms and sufficiently strict in practical terms to provide a substantial degree of support for claims of this nature.

Finally, the issue of proof arises in relation to claims of the type that a particular description applies to the relationship between a sonance and the content of the relevant

passage. Again, this is a context in which proof is both impossible and irrelevant, since a requirement of proof assumes an objectively correct description with which the description in question may be compared. In reality, the sound-content relationship exists not as an objective truth but purely as a mental experience of poets and their audiences. A particular combination of sound and content may be perceived to interrelate in one way (or not at all) by the poet and in other ways (or not at all) by the various members of the audience; only the poet's intentions could be claimed to represent the truth, but this is an overly limited conception of poetic meaning and one which this study does not endorse (1.9 a). Thus, a proposed description must be understood not as an attempt to identify the truth but simply as a suggestion as to how the sound and content in question may be perceived to interrelate.

Sceptics might argue that such a suggestion is little more than a subjective opinion, but, where there is no objective truth, ascribing value to a reasonable and plausible suggestion is clearly not unusual in the study of literature; moreover, this subjectivity is essentially restricted to the finite number of possibilities acknowledged by the scheme (2.4 d). Other than in the detailed readings (Part 4), I generally do not argue for the plausibility of a particular suggestion, since the possibility of the relationship in question will already have been established at a more general level, and in most cases my view of the content in question is entirely uncontroversial. My hope is simply that the reader will accept that the majority of my suggestions are reasonable and plausible and therefore grant value to my overall application of the scheme.

It directly follows from the above discussion that two or more suggestions as to the relationship between a particular sonance and the content of the relevant passage may be equally and simultaneously valid. This is so not only because different members of the audience may have different and equally valid responses, but also, and more importantly, because an individual may have a complex response requiring a complex description. In other words, even if the relationship in question did have an objectively correct description, there is no reason why this should not comprise several distinct parts. Thus, a single sonance may relate to content both repetitively and harmonically, through several modes of repetition, through several harmonies, using several sonic properties, and so on. In general, I suggest only one or two of the more reasonable descriptions available for a sonance, and do not pretend to have exhausted every possible description. The reader may well consider other descriptions to be more appropriate than my suggestions, but, to

emphasise the point, it is not necessary to regard all but one description as incorrect. Of course, this does not mean that all suggestions are equally valid or valuable: one description may be more reasonable than another, and a description which is unreasonable may be rejected as invalid. This complex situation is rendered even more so by the fact that a single passage may contain several sonances, each of which may relate in a variety of ways to the various aspects of content presented by the passage; again, this complexity should not become a source of disagreement but should be embraced as part of the reality of poetry.

b. Arguments from linguistics

1. The sound of speech is transparent

“When we listen to speech the actual sounds go in one ear and out the other; what we perceive is *language*” (Pinker 2000: 165). In other words, the process of speech-perception ‘looks’ through the acoustic signal to the underlying phonemes: the sound of speech is ‘transparent’ (Bredin 1996: 557). One might claim, therefore, that value cannot be ascribed to speech-sounds since the mind does not actually register them. According to Jakobson (1960: 356), however, the distinguishing feature of poetry, the ‘poetic function’, is a “focus on the message for its own sake”, achieved through the use of ‘equivalence’ in the process of combining linguistic elements to produce the message (358). That is, perhaps over-simplistically, general repetition of linguistic elements (see Taylor 1980: 55–6) calls attention to the very language of the poetic text.⁸ In poetry, therefore, usually to some extent and more so in sonically noteworthy passages, we consciously attend to the sounds themselves, which are thus relatively ‘opaque’. We continue, of course, to perceive the underlying phonemes (hence the opacity is only ‘relative’), but simultaneously our consciousness partially perceives the acoustic signal itself. Tsur (1992: 9; see 8–18 for experimental and conceptual support) calls this ‘the poetic mode of speech-perception’. Presumably articulatory properties may become opaque in the same way, not only when reading poetry aloud but also in silent reading and even in listening (according to the motor theory of speech perception, listeners decode speech by reference to the articulations that produced it; on this and other theories of ‘active’ speech perception see Crystal 1987: 148).

⁸ Attridge (1987: 20–1) points out, however, that Jakobson’s ‘principle of equivalence’ “does not mean merely ‘the principle of similarity’. Dissimilarity and antonymity are mentioned as well as similarity and synonymity.” Therefore, my reference to ‘repetition’ here should probably be taken to include patterning and contrasting of sounds, as it does elsewhere. Also see 1.2 b.

2. The phoneme is non-significative

The fundamental function of phonemes is to distinguish one word from another (0.2 b). Unlike words, phonemes do not signify anything in themselves, but only in combination with other phonemes. The function of phonemes, then, is contrastive rather than significative. This seems self-evident, and certainly very few people would argue otherwise. Far from arguing for phonemic signification, I will not make any claims about signification or even about phonemes themselves. Instead of phonemes, I will consider on the one hand the repetition of phonemes, and on the other the acoustic and articulatory properties of speech-sounds; and the value I will attribute to this repetition and these sonic properties will be a conditional potential to interact with content rather than an unconditional power to signify content. My study, therefore, will not attempt to challenge this linguistic principle.⁹

3. The sound of a word is arbitrary

This is the conclusive answer provided by modern linguistics to the age-old question whether words have meaning by nature or merely by convention. We now know that the relationship between the form of a word and the meaning it signifies is, in general, arbitrary and conventional: there is nothing particularly house-like, for example, about the expression /haus/ and nothing particularly dog-like about /dɒg/. I say ‘in general’ partly because most linguists have acknowledged the non-arbitrary nature of lexical onomatopoeia (*bang*, *pop* etc.), though this is “usually held to represent a negligible fraction of the entire language” (Ohala 1994: 325). More importantly, the qualification acknowledges the fact that the arbitrariness principle refers primarily to normal, referential language. In poetry, however, a sequence of sounds may become relatively opaque, as discussed above (0.4 b.1), which lends the sounds a certain autonomy from their conventional, referential role in a word-meaning relationship: “their bonds with poetic semantics are not reducible to the ordinary role required from them within these conventional units by the humdrum use of language” (Jakobson and Waugh 1979: 222). When believers attempt to describe a meaningful relationship between sound and content in poetry, the sound referred to is not the sound of individual words but this larger-scale, autonomous type of sound; likewise, the content referred to is not the meaning of

⁹ Whissell (1999: 19) similarly argues that the sound-content relationship can be studied without challenging the principle that the phoneme is non-significative: “Ineffective dialogues between phonosymbolists and other linguists are partly due to the implicit but erroneous assumption that sounds can only perform one or the other of these functions – that they can either carry meaning in their own right [i.e. signify meaning] or become associated with meaning, but not both.”

individual words but a larger-scale, less-specific theme, motif, mood, tone or concept.¹⁰ The arbitrary word-meaning relationships continue to function, of course, but are simply complemented by a poetic relationship between different types of sound and content.¹¹ Again, therefore, my study will not attempt to challenge this fundamental principle.

0.5

Scope and context

As a final preliminary matter, it is worth emphasising the limited scope of this study and mentioning a number of key works with which one might be tempted to compare it, many of which have quite different aims from my own.

Firstly, this is not a study of the use of sound in language in general. That field has been extensively investigated by works such as Jakobson and Waugh's seminal *The Sound Shape of Language* (1979), and I do not pretend to have contributed to it. My study is limited to the specific context of poetry. More importantly, this is not a study of the general use of sound in poetry, but a study specifically of the relationship between sound and content. With regard to the classical languages, the more general field has been nearly exhausted by an abundance of studies, particularly in the nineteenth and early twentieth centuries, with titles such as 'Alliteration in Aeschylus' and 'Assonance in Homer' (see, for example, the extensive references in Herescu 1960: 129). Deutsch's well-known *The Pattern of Sound in Lucretius* (1978; based on her 1939 doctoral dissertation) properly belongs to this movement, containing only a brief discussion of 'onomatopoeia' (15–19) and otherwise focusing on the purely stylistic use of sound. I personally find such studies unsatisfying and do not claim to have incorporated, let alone surpassed, their complex

¹⁰ As Friedrich (1978: 40) states, linguists "have often overlooked the ... difference between sentence-like symbols, which one creates with relative freedom, and, on the other hand, the radical symbols which are relatively pre-fabricated units in the semantic structure of the speech-community". Friedrich provides a useful discussion of the various ways in which linguists have used the term 'arbitrary', describing the formulation of the arbitrariness thesis as "typically naïve and dogmatic" (25); he emphasises that a system is not entirely 'arbitrary' merely because it is largely 'conventional' (especially at 39).

¹¹ Cf. Fónagy (1965: 87): "Phonetic features play in poetry a *double role*: On the one hand, they are elements of arbitrary signs, connected with reality through word and sentence; on the other hand they are *immediately* linked with experience through symptomatic and symbolic correspondences existing between phonetic and non-linguistic events."

analyses of sonic arrangement, regarding these matters as unimportant to my area of interest, the sound-content relationship. Again, however, this is not a study of the sound-content relationship in language in general, but only in the specific context of poetry. The more general field is best left to studies that take a psychological approach, such as Tsur's *What Makes Sound Patterns Expressive?* (1992), or a linguistic approach, such as the collection of essays in *Sound Symbolism* (Hinton et al. 1994) or Jakobson and Waugh's chapter on 'The Spell of Speech Sounds'. As discussed (0.4 a), I take a simpler approach which is appropriate only within the narrower, more practical scope of my study.

In addition to Deutsch (1978), mentioned above, a number of other major works have dealt to some extent with the sound-content relationship in classical poetry. The title of Herescu's *La Poésie Latine: Étude des Structures Phoniques* (1960) makes it perhaps the most obvious text for comparison with my study. However, the majority of this work deals merely with sound itself, not its relationship with content; there is a brief section on 'l'image auditive' (108–28), but this offers little more than a haphazard collection of suggested correspondences of varying plausibility, and suffers, I believe, from Herescu's undue focus on syllables under ictus. Marouzeau's *Traité de Stylistique Appliquée au Latin* (1935) deals, naturally, with Latin stylistics in general. A brief section entitled 'valeur des sons' (17–32) is far from systematic or comprehensive, but does present a number of specific harmonic correspondences and supporting examples which, though generally without justification, are quite plausible; another section on alliteration (42–7) contains a few relevant impressions, but the author is merely observing that alliteration is common in such passages rather than recognising any modes of repetition. Helpfully, Marouzeau also provides a very similar but more relevant study of style in a short article entitled 'Horace Artiste de Sons' (1936). Wilkinson's *Golden Latin Artistry* (1963) also deals with Latin stylistics in general, like Marouzeau's earlier work, but contains one of the best attempts to categorise the harmonic uses of sound in Latin poetry (53–73). This scheme, however, which is really a loosely organised enumeration of phenomena, includes a number of redundant categories and omits a number of important categories; it is discussed in detail at a later stage (1.7 g).

Moving away from Latin, Stanford's *The Sound of Greek* (1967) is one of the most extensive investigations into linguistic sound in a classical language. However, much of the work deals with the role of linguistic sound in Greek life generally, its apparent aim is predominantly to describe the Greeks' own perceptions of their language, and the focus is

generally on euphony rather than the broader sound-content relationship. Nevertheless, Stanford does note a few repetitive correspondences (83–9) and, more importantly, discusses in a chapter entitled ‘mimesis in words’ (99–116) most of the broad harmonic categories. Stanford’s argument for the reality and extent of the sound-content relationship is passionate and relatively useful, but suffers from his frequent lapses into romanticism. Also dealing with a language other than Latin is Grammont’s seminal text *Le Vers Français: Ses Moyens d’Expression, son Harmonie* (1913). This is probably the most important of the works considered here since its second part is an extensive discussion of ‘les sons considérés comme moyens d’expression’, that is, in terms of their relationship with content: Grammont suggests numerous aspects of content with which repetition may correspond (208–31), and numerous harmonic potentials of the major French vowels and consonants (232–311). Many of these suggestions are plausible and useful but, as often, the work suffers from a lack of systematic organisation and, more importantly, a lack of real argument and justification.

Thus, the major works in this field generally have a much broader scope than my study and, partly for this reason perhaps, are usually insufficient in their treatment of the sound-content relationship. This study therefore improves upon the works mentioned in many ways, though not, of course, in the many ways in which their scope extends beyond mine.