

**Music, Timbre, Colour in Fin-de-Siècle Vienna:
Zemlinsky, Schreker, Schoenberg**



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Timbre and orchestration are neglected parameters in analytical writing, partly because analysis traditionally privileges pitch organisation as the primary structural parameter in music, but also because timbre appears more resistant than pitch to theoretical abstraction and systematisation. Yet, in the music of early twentieth-century Viennese composers such as Schreker, Zemlinsky and Schoenberg, timbre often assumes a pre-eminent place in musical design and formal architecture. In such works, timbre often moves from what Robert Hopkins (1990) describes as a ‘secondary parameter’ to the forefront of a listener’s consciousness. Conventional analytical approaches—including Schenkerian, Neo-Riemannian or pitch-class set theories—arguably have little to offer at such moments.

This thesis begins by examining the ‘crisis of response’ to timbre in fin-de-siècle Austro-Germanic circles and, in particular, to the increasingly complex timbral constructions of many Viennese composers, such as Franz Schreker and Arnold Schoenberg. The crisis of response appeared to stem from an inherited nineteenth-century view of orchestration as ornamental in function, as well as the lack of an appropriate analytical framework and meta-language with which to critique the growing importance of timbre as a musical parameter.

This thesis contributes to the discussion as to the how the area of timbral analysis might develop: firstly, by treating timbre as an *emergent* property rather than an absolute analytical category (i.e., that timbre often results from a complex interaction of multiple musical parameters); secondly, by considering the effect of timbre’s spatial properties within the auditory scene on subject-position through examination of contemporary and more recent theories on the convergence of the visual and auditory arts; and thirdly, through timbre’s ability to function as an agent of immanent musical critique through disjunctive juxtapositions, or by historically-contextualized responses to codified orchestral tropes as found in Alexander Zemlinsky’s *Der Zwerg*. Timbre certainly was not always the secondary parameter some fin-de-siècle critics suggested it was, or wanted it to be.

The joint purpose of this thesis is to offer historically-engaged analytical readings of neglected works from twentieth-century Vienna (alongside a few better-known works whose timbral construction had been left unanalyzed), and to reflect on the benefits of applying recent research to contemporary theories of timbre. These two aims are set in productive counterpoint rather than a straightforward synthesis, with the adoption of recent cognitive research and theories of subject-position feeding into analyses of historical work in order to try to mediate the gap between theory, text, and musical practice.

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Timbre and orchestration are neglected parameters in analytical writing, partly because analysis traditionally privileges pitch organisation as the primary structural parameter in music, but also because timbre appears more resistant than pitch to theoretical abstraction and systematisation. Yet, in the music of early twentieth-century Viennese composers such as Schreker, Zemlinsky and Schoenberg, timbre often assumes a pre-eminent place in musical design and formal architecture. In such works, timbre often moves from what Robert Hopkins (1990) describes as a ‘secondary parameter’ to the forefront of a listener’s consciousness — a moment when one is suddenly aware of texture as a sound object. Conventional analytical approaches—including Schenkerian, Neo-Riemannian or pitch-class set theories—arguably have little to offer at such moments.

This thesis grew from a growing dissatisfaction about the manner in which timbre was (mis-)treated as an analytical parameter. Many analytical accounts of fin-de-siècle Viennese music seemed content to sideline, ignore, or dismiss the timbral component of a work’s construction. Treating timbre in this way, in favour of an analytical focus on more traditional musical parameters, seemed to be ignoring an important topic for analytical discussion, especially given its predominance in many fin-de-siècle Viennese works. Even in Robert Hopkins’s analytical monograph, *Closure and Mahler’s music: the role of secondary parameters* (1990, mentioned above), timbre is still seen as a parameter lacking in analytical worth. Such a viewpoint seems difficult to maintain when considering the strength of fin-de-siècle reaction to Mahler’s use of the orchestra. Further initial research uncovered work by Karen Painter (1995; 1996) and John Sheinbaum (2002; 2006) that began to address this problem in relation to Mahler’s symphonic output, and the contemporary reception issues surrounding Austro-Germanic orchestration. This thesis is indebted to some of their ideas for its starting point, but specifically casts its net wider to focus primarily on the generation of Viennese composers after Mahler—particularly those mentioned above—as it considers that it was these composers who found themselves having to make difficult compositional decisions with regard to music’s timbral construction. Following the developments of Mahler’s experimental orchestral style, fin-de-siècle Vienna’s composers and audiences faced a ‘crisis of

response' to the role of orchestration in music — a crisis that this thesis seeks to explore, and, moving beyond the work of Sheinbaum and Painter, suggest ways in which this historical context might ground a contemporary analytical response.

Musical developments in fin-de-siècle Vienna present a particularly concentrated and intense focal point for research of this kind and this thesis has a joint purpose: both to offer historically-engaged analytical readings of neglected works from early twentieth-century Vienna (alongside a few better-known works whose timbral construction has been left unanalyzed), as well as to reflect on the benefits of applying recent research to contemporary theories of timbre. These two aims are set in productive counterpoint rather than a straightforward synthesis, with the adoption of recent cognitive research and theories of subject-position feeding into analyses of historical work in order to try to mediate the gap between theory, text, and musical practice.

This thesis contributes to the discussion as to the how the area of timbral analysis might develop: firstly, by treating timbre as an *emergent* property rather than an absolute analytical category (i.e., that timbre often results from a complex interaction of multiple musical parameters); secondly, by considering the effect of timbre's spatial properties (within the auditory scene) on subject-position through examination of contemporary and more recent theories on the convergence of the visual and auditory arts; and thirdly, through timbre's ability to function as an agent of immanent musical critique through disjunctive juxtapositions, or by historically-contextualized responses to codified orchestral tropes as found in Alexander Zemlinsky's *Der Zwerg*. Timbre certainly was not always the secondary parameter some fin-de-siècle critics suggested it was, or wanted it to be.

The need for such developments in timbral analysis can be seen from the list of analytical techniques mentioned in the opening paragraph. Analysis of music's timbral element is most definitely still on the periphery and, in the same way that musicology as a discipline seeks to look beyond the canon of musical works, so analysis should seek to extend its toolkit beyond the theories mentioned above which, too, have become canonically established. Rose Rosengard Subotnik's *Deconstructive Variations* (1996) highlights the historical devaluation of the medium through which music is sounded (i.e., timbre), and in response to this asks the question: "should we not be trying

[to] develop intellectually rigorous ways of analyzing sound and style as well as structure?”¹ This thesis is intended as a direct response to that question as it re-examines the perceived ‘secondary’ nature of musical timbre by treating it as an emergent parameter and analyzing the subject-positions it frequently engenders, but always doing so from within the fin-de-siècle Viennese contextual grounding that the music was initially created.

The thesis as a whole consists of 5 chapters, which can be further divided into two parts: the first three form a Viennese contextual grounding by examining some of the most important contemporary issues surrounding how timbre was perceived at the time, sometimes using recent developments in ecological theory to explain these responses and to create a hermeneutic position that allows these contemporary observations to form an suitable analytical framework. Short analytical case studies in each chapter serve to exemplify the ideas put forward before moving on to the final two chapters which take the form of two more in-depth musical case-studies based around the Viennese musical night scene (chapter 4) and the orchestral treatment of beauty from a fin-de-siècle Viennese context (chapter 5). Throughout this thesis the aim has been to analyze timbre not in isolation, but in the way it interacts with the other musical parameters: to do otherwise would be just as misguided, I suggest, as completely excluding timbre from musical analysis.

Chapter 1, “Orchestral Timbre in Fin-de-Siècle Vienna: Ornament and/or Crime?”, uses both contemporary sources and more recent surveys of fin-de-siècle Vienna to outline a critical historical and cultural context in which to situate later, more specific, discussion of timbre. It builds upon the historical surveys of William Johnston (1972), Janik and Toulmin (1996), Carl Schorske (1981), Leon Botstein (1985), and Christopher Hailey (1993)—as well as more recent surveys by Nicholas Cook (2007), and Julian Johnson (2009)—which highlight the cross-fertilisation of the various arts through the intellectual circles of the Viennese *Kaffeehäuser*; the concerns over decadent decline in the new; and the resultantly staunch defence of tradition. It also discusses the post-Schorskean scholarship from Stephen Beller, et al. (2001). The primary questions it asks are: “what were the dominant responses to timbre in fin-de-siècle Vienna?” and “what were the primary outlets for such responses?”. Beginning with an extract from Adolf Loos’s *Ornament and Crime* (1908), it suggests that the prevailing view was one of timbre and orchestration as musical ‘ornament’, but in doing so

¹ Subotnik (1996, 174-5).

highlights the problem of the subjective nature of where one might draw the boundary between what was deemed 'acceptable' and what was therefore 'ornamental' or 'excessive'. I suggest that the main outlets of response to timbre were threefold (the contemporary orchestral treatise; the discussion surrounding the 'un-orchestral' piano transcription; finally, the language of contemporary concert reviews) and the rest of the chapter develops a more complex analysis by examining each element in turn. Contemporary orchestration treatises offer a number of snapshots of what was deemed 'acceptable', or 'good' at the time, and provide a backdrop with which to frame and contrast the contemporary views that timbre was mere 'ornamentation', or 'sensuous' surface. Next, the discussion of the piano transcription highlights a problem whereby composers of the fin-de-siècle were approaching a more 'instrument-centred' concept of the musical idea, yet people still learnt works from their piano transcriptions, encouraging, in some cases, very negative responses if the discrepancy was considered too great. Finally, the chapter highlights similar concern with the timbrally variegated music of Franz Schreker, and suggests a contemporary 'crisis of response', exemplified by the contrasting reviews of his *Kammersymphonie* (1916). When faced with such music, critics seemed to adopt two default modes of reply: either to resort to straightforward description of timbral events, lacking in critical value; or to dismiss—or in some cases, welcome—the affect as somehow decadent or degenerate. Neither seemed satisfactory from an analytical perspective. The problem was (and remains) the lack of an appropriate analytical framework, and also the lack of adequate critical meta-language, with which to satisfactorily address the growing importance of timbre as a musical parameter.

Chapter 2, "Analysing Timbre — Contexts and Methodologies: Adorno, Enchantment, Distance, Perspective, Norms & Subversion, Subject-Position", attempts to move toward a modern hermeneutic framework with which to assess timbre's importance, but one which is grounded in the contextual issues of that time and place. It begins with an in-depth examination of Theodor Adorno's writings related to timbre. Whilst he was critical of 'excessive' timbre in the same manner as the conservative Viennese voices chapter 1 described, Adorno was one of the first writers to critically assess timbre's value as a musical parameter, and describes its ability to subvert musical norms, to enchant, and to function as a signifier of distance within the auditory scene. Starting with Adorno's negative concept of the *Phantasmagorisch* (*Versuch über Wagner*, 1952) in contrast to the more

positive categories of *Durchbruch*, *Suspension*, and *Erfüllung* (Mahler: *Eine musikalische Physiognomik*, 1971), we see that Adorno views timbre as a powerful parameter, yet a potentially problematic one — one that is deeply embedded within notions of perception, and therefore has the ability to be ‘deceptive’. Adorno’s views, whilst outlining the problematic nature of timbre (particularly in the ‘Schrekerian phantasmagoria’), also provide a challenge to the modern analyst: though they open new windows on timbral aspects of early twentieth-century music, they also expose the need for a more objective analytical model. In this sense it suggests that Adorno’s categories should not be considered ‘positive’ or ‘negative’ in their value judgement, but rather as neutral categories that describe timbre’s function at a particular moment in greater detail. The *spatial* element of Adorno’s description of timbral configurations correlates with some of the responses in chapter 1, but also with the many contemporary opinions (Adorno included) that proposed some sort of spatial connection between the visual arts and music. The chapter continues through a closer examination of a number of contemporary sources relevant to the Viennese discussion, including Adorno’s essay *On Some Relationships between Music and Painting*, but which in particular looks to critically examine the perceived connection of fin-de-siècle composers to the art work of the newly-formed Vienna Secession group. In particular, it examines timbre’s role in the perceived link between Schreker and the artist Gustav Klimt in their use of ornament and spatial construction. It does so in order to find what Adorno calls moments of *Konvergenz*, where different parameters can be seen share the same function across different art forms — a concept highlighted in the work of Walter Frisch (2005). Having established the boundaries of *Konvergenz* between music and art, current musicological theory is called upon to develop these responses, with particular reference to Albert Bregman’s *Auditory Scene Analysis* (1990), and Eric Clarke’s *Ways of Listening: an ecological approach to the perception of musical meaning* (2005). Albert Bregman’s writing offers a model for approaching the convergence between the spatial and auditory realms, and, with Eric Clarke’s work, offers insight into the various ecological factors affecting how musical subject-position might be formed from listener responses to timbre, addressing issues of hierarchy, auditory masking and illusion, ‘primitive’- and ‘schema’-based judgements, as well as spatialization and distance. The chapter ends by suggests that these recent theories, and Adorno’s spatial categories, build upon the Viennese concerns discussed so far

and can be taken as a hermeneutic toolbox with which to interpret more precisely *how* composers at the turn of the century may have been using such timbral elements to alter subject-position.

Chapter 3, “Colour, Brightness, and Timbre: Examining Timbre’s Role in Auditory-Visual Comparisons in Fin-de-Siècle Vienna”, continues along the ecological path set out in chapter 2. Following the idea of *Konvergenz* between the visual and the auditory, this chapter seeks to examine the supposed relation between visual colour and musical timbre put forward in a number of ‘synaesthetic’ works in the early decades of the twentieth century. Contemporary writing on music seemed to accept the term ‘colour’ as synonymous for timbre, or orchestration. In addition, the early decades of the twentieth century saw Schoenberg experiment with the idea of *Klangfarbenmelodie* and—as his relationship with the Russian painter Wassily Kandinsky developed—the creation of music that involved visual colour as a key synaesthetic tool. This chapter explores the perceived relationship between colour and timbre at the fin-de-siècle, and a discussion of Kandinsky and Adorno’s views on the topic, followed by the analysis of three ‘synaesthetic’ works from the period. The aim is to establish where the function of visual colour and timbre can be seen/heard to converge, to deconstruct fin-de-siècle assumptions, and, as a result, understand timbre’s musical function in greater detail. The chapter suggests that, in both art and music, (tone-)colour has an important sub-parameter: brightness. Whilst certain individual timbres *or* visual colours can have clear symbolic associations (either learnt, or synaesthetic) that have potential analytical implications, this chapter argues that it is timbral *brightness* which provides a more generally perceived correlation between the visual and the auditory that can be used analytically. The second part of the chapter uses recent ecological theories regarding colour and timbre to construct a parametric map of musical space, with timbre as the central element. The result of which is the ability to more clearly analyze timbre’s role in constructing musical perspective, and positioning musical objects within the auditory scene. The final case study uses this map as a tool to analyze the role of timbre in Schreker’s changing constructions of musical distance in his opera *Der ferne Klang* (‘The Distant Sound’), and how at times these seem to emulate the effect of Klimt’s stylistic distortion of perspective in his ‘telescopic’ landscape paintings.

Chapter 4, “Timbral Constructions in the Viennese Musical Night Scene: Hysteria, Dream, and Escape”, puts forward a case for the specific value of analyzing the timbral construction of fin-de-

siècle Viennese musical night scenes. It argues that such musical night scenes—particularly operatic settings or those with text—frequently act as heightened focal points for the exploration of the individual psyche in crisis; according to Jacques Le Rider (1993), such ‘crises of identity’ became a hallmark of the modern condition as made manifest in fin-de-siècle Viennese society and its cultural products. This chapter identifies three categories of Viennese musical night scene: the idealized ‘escape’ from the city bustle of the day; the hysterical or ‘mad’ subject in isolated, traumatic introspection; and the nocturnal dream. Following some of the previous chapter’s conclusions regarding brightness, and by analysing the use of orchestral tropes that contemporary audiences would have associated with darkness and moonlight, this chapter argues that timbre plays an important role in the portrayal of subjective crisis within the three categories of night scene. Two analytical case studies examine the role of timbral construction within the Viennese musical night scene: 1) Schoenberg’s *Erwartung*, op.17, and the ‘hysterical’ night; and 2) a comparison of Schreker’s *Nachtstück* interlude from *Der ferne Klang*, with the fourth and sixth songs from Zemlinsky’s *Lyric Symphony*, highlighting contrasting examples of the nocturnal ‘dream’. Both case studies suggest inner withdrawal and ‘escape’ in different ways, and emphasise the importance of timbre’s role in the effective portrayal of such states of alienated subjectivity and identity crisis.

This chapter argues that in order for successful ‘timbral analysis’ a higher level of classification is required, beyond ‘Timbre A, Timbre B, etc.’, and in these two case studies this is achieved. The modified use of Carolyn Abbate’s noumenal-phenomenal distinction (1991) for *Erwartung*’s analysis allows similar timbral tropes to be classified into different categories, allowing the analysis to move beyond simple structural observations (e.g. ‘Timbre B is repeated in bar 34’), and instead to assess the *function* of each trope as part of *Erwartung*’s narrative trajectory toward inward retreat. Similarly, in Zemlinsky’s fourth *Lyric Symphony* song, though in a less formal fashion, recurring timbral tropes are classified by their level of disjunction, and narrative function, to suggest inner retreat through a moment of nocturnal fantasy that contains key features associated with dream, and refers back to the discussion of perspective in the previous chapter.

The final chapter, “Timbre and the Uncanny Reconfiguration of the Outsider: The Grotesque in Zemlinsky’s *Der Zwerg*, Op. 17”, returns to address some of the ideas set out in chapter 1, namely the idea that certain timbral configurations, according to conservative fin-de-siècle commentators, were

considered beautiful, excessive, ugly, or inappropriate. Here we turn to examine the way in which Zemlinsky appears to self-consciously use these engrained viewpoints for dramatic effect in his opera based on the story of Wilde's grotesque dwarf. Based on Oscar Wilde's story *The Birthday of the Infanta*, the opera specifically comments on issues of beauty, self-identity, and self-worth. Sherry D. Lee's recent articles 'The Other in the Mirror, or Recognizing the Self: Wilde's and Zemlinsky's Dwarf' (2010), and 'A Florentine Tragedy, or Woman as Mirror' (2006), discuss the way Zemlinsky's characters construct their own identities through the 'others' present in the play. Lee's discussion of *Der Zwerg*, highlights motivic, metrical, and harmonic differences between the musical presentation of 'the court', and that of the Dwarf. However, Lee does not seem to consistently discuss issues of self-presentation in private (when the Dwarf is alone) versus public, nor does she consider timbral presentation. At the start of the opera, the music of the Infanta's maids and her court seems to conform to traditional standards of beauty, compared with the grotesque orchestral gestures heard as they imagine the Dwarf's arrival. Lee's discussion places emphasis on such moments of orchestral 'ugliness', but fails to mention that such moments are scarce within the opera, and that instead the majority of the Dwarf's music is constructed as beautiful spectacle: his *Heldentenor* voice and post-romantic orchestral style. Within the dramatic context of Wilde's play, the frequent juxtaposition of this music with the neoclassically-stylized music of the Court potentially situates Zemlinsky's opera as a critique of the debate surrounding acceptable standards of orchestral beauty and excess outlined in this thesis's opening chapters. In addition to discussing *Der Zwerg's* use of the timbrally grotesque, this chapter examines how the work's timbral construction uncannily reconfigures and reverses expected hierarchies of class and power as it progresses: with the Infanta as 'toy', and the Dwarf as the enchanting centre of attention; and the gradual presentation of the 'refined' Court's music as rigid, distant, and 'anempathetic' (Chion, 1994) to the scenes portrayed on stage. Whilst contemporary works like Schreker's *Die Gezeichneten* had begun to function not just as examples of highly sensuous orchestration but also as works whose drama at times criticised the sensuous acts it often depicted, Zemlinsky's *Der Zwerg* juxtaposes different orchestral styles in a more complex way that follows Adorno's model of immanent self-critique. This allows, despite the opera's adherence to traditional tonal schemes, *Der Zwerg* to be viewed as one of Zemlinsky's first explorations in a more modernist aesthetic. In doing so, Zemlinsky creates an opera that not only critiques contemporary

societal response to physical beauty and the grotesque appearance of the Dwarf, but also contemporary responses to timbral beauty and the musically grotesque.

This thesis is ultimately about timbre in fin-de-siècle Viennese music, but the project methodology is underpinned both by historical source material and by more recent developments in music cognition. It is important to stress that whilst it does draw on recent theoretical developments in cognitive and ecological theory, this is not in order to dismiss earlier opinions and material from the fin-de-siècle, but to augment understanding of those opinions — the theories may offer up-to-date explanations, but the analytical responses put forward here are still shaped and channelled by historical patterns of debate. Whilst the topic at this thesis's core—the discussion of how to engage with a work's timbral construction in an analytically valid way—is of wide relevance across a broad range of early twentieth-century music, this thesis suggests that this generation of Viennese composers present a uniquely concentrated and intense focus for analytical work of this kind. The contribution of this thesis is that it attempts a modern approach to timbral analysis that is grounded in the contemporary response to the works it discusses, allowing both for a greater understanding of Austro-Germanic approaches timbral construction, and of the analytical value of timbre itself. From these timbral analyses, this thesis offers insight into works that are both well-known (Schoenberg's *Erwartung*, Op.17), as well as those that are deserving of a wider audience, and aims to encourage greater critical response to timbre's analytical role more generally.

* * *

A note about bar numbers: throughout, when referring to bar numbers, I adopt the traditional approach (e.g., b.9; bb.10-12). However, when the score uses rehearsal numbers I adopt the following format: [27]⁻¹ refers to one bar before rehearsal number 27; [39]⁺⁶ refers to six bars after rehearsal number 39, and so on.

When extracts from musical scores have been referenced, I have used their publisher's catalogue number (e.g., UE 30975). UE = Universal Edition; BH = Boosey & Hawkes.

For ease of reference, appendices, figures, and tables are preceded by the number of the chapter that they relate to. For example, those items belonging to chapter 3 would be formatted thus: table 3.x, figure 3.x, and appendix 3x.

Orchestral Timbre in Fin-de-Siècle Vienna: Ornament and/or Crime?

Every period had its style: why was it that our period was the only one to be denied a style? By “style” was meant ornament. I said, “Weep not. Behold! What makes our period so important is that it is incapable of producing new ornament. We have outgrown ornament, we have struggled through to a state without ornament. Behold, the time is at hand, fulfilment awaits us. Soon the streets of the cities will glow like white walls! [...] It is then that fulfilment will have come”. But there are still hobgoblins who will not allow it to happen. Humanity is still to groan under the slavery of ornament. Man has progressed enough for ornament to no longer produce erotic sensations in him [...] Man had progressed far enough to find pleasure in purchasing a plain cigarette case, even if it cost the same as the one that was ornamented. [...]the epidemic of ornament is recognized by the state and is subsidized by government money. I, however, consider that to be regressive. I will not subscribe to the argument that [...] covers itself with the words: “But if the ornament is beautiful!...” To me, and to all the cultivated people, ornament does not increase the pleasures of life. [...] The man of the fifteenth century would not understand me. But modern people will.

— Adolf Loos, *Ornament & Crime* (1908)²

Any discussion of orchestral music in fin-de-siècle Vienna cannot begin without first examining the uniquely Viennese aspects of cultural life that surrounded the controversial rise to prominence of a musical parameter often considered to be merely decorative or ‘ornamental’: instrumental timbre. Even now, timbre is still generally regarded as merely a ‘secondary parameter’ (and hence of secondary importance). I suggest that this can, in part, be seen as an inherited standpoint from fin-de-siècle Viennese musical politics and the influential analytical theories that grew out of that wider geographical focal point: those of Heinrich Schenker and his Germanic ‘rival’ Hugo Riemann. The modern-day theoretical legacy prioritizes a move away from what was often termed the musical ‘surface’ towards issues of pitch, harmony, structure, and motivic coherence and, as this chapter shall show, it was these parameters that were considered desirable to many of fin-de-siècle Vienna’s

² Loos (2002, 30-31).

musical critics and establishment figures. It is important to note, however, that the negative opinions of fin-de-siècle Viennese music's increasing interest in musical timbre rarely—if ever—came from composers, who were beginning to redefine the accepted concept of what might constitute a 'musical idea' by including timbre as a parameter of equal or, in some cases, prime importance. Arnold Schoenberg's prominent reference to timbre in his harmonic treatise, *Harmonielehre* (1911), is an example of how important timbre and orchestration had become in the Viennese musical debate. Schoenberg diverts his discussion away from pitch relations toward timbre, suggesting that "we should consider the question of mixture of timbres, to which each voice contributes in a thoroughly independent manner", and that it would be a "pedantic exaggeration" for an analyst to suggest that at moments of unison different instrumental voices lose their independence for "this exaggeration also ignores the fact that the voices were at *all* times distinct from each other in *tone quality*".³ Schoenberg's added emphasis gives a sense to the modern reader that he is pushing against the norm of the time in mentioning timbral means in discussions of harmony. More attention will be paid to Schoenberg's writing later, but his most obvious departure from the norm (worth mentioning at the outset as Vienna is established as a central point for timbral-orchestral discussion) is his decision to finish the book with a discussion of the elusive analytical nature of timbre ("What system underlies these progressions?") and a frustration that this is the case, even though "our attention to tone colors is becoming more and more active".⁴ Schoenberg took an unusual step in putting forward this unresolved problem on what might have seemed initially, to some of his contemporary readers, a topic unrelated to harmony. But in doing so he encapsulates a number of historically-contextualised issues that run throughout this thesis: the importance of timbre in music of this period and the difficulty of analysing and responding to it; the idea that timbre is not a parameter to be considered completely in isolation; the idea that timbre was a secondary concern, not considered as fully as other parameters, and in a sense therefore considered 'ornamental' by some – this final section of Schoenberg's treatise sets up a stance, a polemical stance that both admits timbre's problematic nature and sets out its potential worth as something more than ornament.

³ Schoenberg (1978, 63)

⁴ *Ibid.*, 421.

The main concerns of this thesis lie mainly within the timeframe of what Nicholas Cook calls “the first phase of Viennese modernism”, i.e. the beginnings of the Viennese Secessionist movement in 1897, with Gustav Klimt as their leader, leading up to the time of the “second-wave” modernists of Schoenberg and Adolf Loos.⁵ Cook highlights that “visual expressions of the Secession were confusingly variable”⁶, and whilst chapter two considers particular links between music and art of this period, it is equally true that the orchestral music of this ‘secession’ period was obviously varied. One over-riding similarity in reception between the art forms was that critics often considered work from this period overly ‘sensual’ or ‘ornamental’. Leon Botstein remarks that the Secessionists merely “exploit[ed] the decorative and sensual surface of art without getting at the ethical and epistemological essence of an older generation’s corrupt taste”,⁷ with Cook adding that they “critiqued the historicist ornament of the Ringstraße generation, but merely substituted one style of ornament for another”. In Cook’s view it was the critique launched by the second-wave Viennese modernists that was “more fundamental, in that what was at issue was not one or another type of ornamentation, but the idea of ornamentation itself”.⁸ Generalizing in this way, Schoenberg’s approach toward timbre, mentioned in embryonic form above, can be seen to conform to Cook’s pattern: rather than expanding and developing older composer’s orchestral means (although he certainly did that in compositions such as *Gurre-Lieder*), *Harmonielehre* set out a desire to re-think the role of timbre as a more integral part of the composition process. The implications of this shift from the ‘ornamental’ to the ‘fundamental’ seems to have been the heart of the problem in Viennese artistic circles at the turn-of-the-century.

Adolf Loos’s inflated rhetoric, quoted at the head of this chapter, gives one side of a central aesthetic debate taking place across the Arts in the Habsburg capital at that time: it was a debate that critiqued wastefulness, excess, and decadence as immoral, in favour of a more ascetic, less sensual approach. This same debate surrounded the perceived tendency of certain Viennese composers in the decades either side of 1900—particularly Gustav Mahler and the generation that followed him—toward orchestral music that seemed to prioritise sensual timbral configurations over rigorous thematic working. Franz Schreker, whose musical reception becomes a primary focus in this

⁵ Cook (2007, 99)

⁶ Ibid.

⁷ Quoted in Cook (2007, 102)

⁸ Ibid., 102.

chapter's re-examination of fin-de-siècle responses to timbre, was a prominent member of the generation of Viennese composers following Mahler, and, as Christopher Hailey's monograph on Schreker explains,⁹ was also frequently the subject of criticism due to the timbrally rarefied nature of much of his music. In a much-quoted article for the *Frankfurter Theater-Almanach* in 1918, entitled 'My Musical-Dramatic Idea', Schreker explained: "The pure sound, without any motivic profile is, when used with care, one of the essential music-dramatic expressive means, an atmospheric resource without equal".¹⁰ Such a remark seemed to fly in the face of contemporary Austro-Germanic ideals regarding motivic construction and formal construction, which the German critic Walter Niemann outlined as a matter of nationalistic concern against the dangers of foreign influences: "one would have to reject [French Impressionism] out of hand as formless, shapeless, melodically weak, rhythmically atrophied, and—according to the standards of Germanic thoroughness—as childishly underdeveloped in polyphony", writing that if those features of Impressionism were to become a central preoccupation in Austro-Germany it would demonstrate a corrupted younger generation influenced by an "Americanization, mercantilization, industrialization of all public life, with its joy in nervous stimulation, sensation, and glittering superficial appearances."¹¹ The futility of such nationalistic generalizations is highlighted if we return again to Loos's essay where he co-opts the United States as a *positive* influence in his argument against excess and ornament: "Happy is America!", for their inhabitants are not encumbered by the traditions of past ornamental styles.¹² Whilst appearing to conflict with one another, the subtext of both Niemann and Loos's arguments is the danger of superficial surface distractions and over-stimulation at the expense of moral or intellectual substance, which in the case of fin-de-siècle musical discourse appears to have been defined by a perceived lack of motivic working or thematic clarity alongside an increased attention to sensuous orchestration.

Carl Schorske's *Fin-de-Siècle Vienna: Politics and Culture*, first published in 1961, has been influential in bringing fin-de-siècle Vienna scholarship to prominence. Its central tenet, however, that "the Viennese burghers" found "the temple of art [as] an escape, a refuge from the unpleasant

⁹ See in particular chapters 2 and 4 of *Franz Schreker, 1878-1934: a cultural biography* (Hailey 1993), which describe contemporary reaction to Schreker's early orchestral and operatic works.

¹⁰ Schreker, quoted in Hailey (1993, 97).

¹¹ Niemann, quoted in Hailey (1993, 42), from his *Die Musik seit Richard Wagner*.

¹² Loos (2002, 32).

world of increasingly threatening political reality”,¹³ has come under much criticism particularly in the collection of essays *Rethinking Vienna 1900*.¹⁴ Steven Beller, for example, argues that this ‘retreat’ was more ethical and critical than the Schorskean paradigm suggests. For example, Beller writes

what Schorske sees [in Freud’s work] as a retreat into the psyche, becomes [...] an extremely activist attempt to remold vast swathes of human thought—and behaviour. If there was retreat it was only the dialectical prelude for a frontal assault.¹⁵

What Beller is suggesting here is that the various aestheticized ‘retreats’ Schorske describes did not necessarily equate to an apolitical, amoral stance. As we are beginning to see, correct orchestration and timbral usage in fin-de-siècle Vienna were highly debated categories whose discussion frequently had a highly ethical/moral flavour to them. Schorske writes

Aestheticism, which elsewhere in Europe took the form of a protest against bourgeois civilization, became in Austria an expression of that civilization, an affirmation of an attitude toward life in which neither ethical nor social ideals played a predominate part.¹⁶

Certainly, from composers such as Schoenberg and Schreker, we could find a number of lavishly orchestrated musical moments where there is no overt socio-political impulse for them being orchestrated in such a way. However, moments such as these were often precisely the subject of ethical/moral debate as to whether such moments *should* be encouraged or allowed. In addition, due to the prevalence of this sort of discussion in Viennese circles, it became possible for composers to use certain orchestral tropes to afford a politicized sub-text to their works. For example, Peter Franklin suggests that in Schreker’s *Die Gezeichneten* (1915), with its decadent and sometimes debauched subject matter, the diverse and expansive orchestration and timbral palette functions “not only [as] a symptom, but a contribution to [the] discourse *about* art and degeneracy”¹⁷. Another example, Zemlinsky’s *Der Zwerg* (1921), uses orchestral tropes as moral/ethical signifiers, as I will discuss in chapter 5. Fin-de-siècle Vienna, then, seems a particularly ideal focus for the discussion of turn-of-the-century timbre given what Allan Janik, a post-Schorskean scholar, describes as Vienna’s propensity toward a “critical modernism”. This frame of mind, Janik suggests, is based on two features: first, “a *scathing diagnosis* of that attitude to culture that considers art’s power to move us

¹³ Schorske (1981, 8).

¹⁴ Beller (2001).

¹⁵ *Ibid.*, 15.

¹⁶ Schorske (1981, 299).

¹⁷ Franklin (2006, 177).

emotionally by being bigger than life as a drug to get ‘high’ on;” second, it is “a *strategy* for combating the narcissistic, theatrical solipsism that was part and parcel of [the] Viennese religion of art”.¹⁸ This critical atmosphere, fostered by the political stance of those such as Schoenberg and Loos, means that discussions of orchestration, timbre, and ornament were particularly intense as both elements of Janik’s critical modernism were criticisms levelled at fin-de-siècle orchestral usage.

Ornament and Crime was not Loos’s first essay on the topic of ornamental superficiality and deceptive surface configuration: the eruption of Vienna’s mixed-style *Ringstraße* in the second half of the nineteenth-century—a project that would cause him to write *The Potemkin City* (1898)—demonstrated, according to William Johnston, a “Biedermeier passion for amassing details”, suggesting that “Vienna’s architects were decorators [who] preferred to glorify past masters rather than to supplant them”.¹⁹ This historicizing impulse toward past ornamental styles created “ornate décor” that often “subverted the purpose” of the building in question²⁰ — precisely the sort of architectural process that Loos was seeking to ‘supplant’, moving away from a ‘regressive’ sensuality found in excessive ornament, in search of a modern, functional, aesthetic approach.

The strength of public opinion on such matters was strong. In 1910, revelation of the newly-constructed plain white walls of the *Loos Haus* in Vienna’s central Michaelerplatz caused the *Neuigkeits-Welt-Blatt* to report that

Every passerby already notices it from afar due to its more than oversized bareness[.] However, the builders have been instructed not to allow the façade to remain so unadorned, and in fact the scaffolding that had already been taken down has now been put up again and a façade is going to be created that will presumably more fitting for the house’s location.²¹

The plain building faced the highly decorated façade of the Imperial Palace, and, despite Loos writing a number of newspaper articles defending his intentions, opinion against the project remained strong²² with one city councillor demanding “a resolute stance” against “architecture removed from [...] ornament”.²³ Despite protestations by the *Allgemeine Ingenieurzeitung* that any alterations were

¹⁸ Janik in Beller (2001, 41).

¹⁹ Johnston (1972, 149).

²⁰ Ibid.

²¹ Quoted in Kurdiovsky (2006, 302).

²² See discussion in Long (2009, 213).

²³ City councillor Karl Rykl, quoted in Kurdiovsky (2006, 303).

tantamount to the “disfiguring [of] buildings by plastering them with ornaments”,²⁴ the authorities asked Loos to permanently attach a number of carefully placed window boxes to the building’s exterior.

The complex Viennese debate over ornamental excess was equally present in the discourse surrounding music. Heinrich Schenker specifically addressed the problem in his *Contribution to the Study of Ornamentation* (1903) and outlined the contemporary Viennese musical situation by suggesting that the trend toward the “denigration of embellishments” had arisen as a reaction against the “mediocre composers” who “began to overload their works with ornaments while misinterpreting their melodic function”.²⁵ Schenker’s remarks initially seem to place him at odds with the radical position advocated by Loos, whose comments surely place him in the ‘reactionary’ camp Schenker seems keen to avoid. However, there is a clear common purpose between both writers: both Schenker and Loos are reacting against excess; against Art that can be seen or heard as a ‘decadent’ reaction against refined bourgeois values; against music, visual art or architecture that prioritized the ‘sensual’ over the ‘intellectual’ through ornamentation that appeared ‘inorganic’ and extraneous to the ideas, content, or function of the work in question. This dichotomy between form and substance, with its foundation in Austro-Germanic Idealism, frequently forms the subtext of the Viennese critique of artistic products. However, one thing that becomes clear from the views of Schenker and Loos alone is the highly subjective nature of where one should draw the boundary between that which is ornamental and that which is not. In addition, the situation becomes more complex due to certain artists of the period seeing decadent excess not as something to criticize, but rather as a badge of honour to be worn proudly. For a number of composers, however, the use of orchestral sensuality and decadence was not a smoke-screen to conceal a lack of intellectual rigor but rather a modern way of creating musical objects, objects in themselves worthy of contemplation through the foregrounding and development of musical the parameters that many had considered secondary.

²⁴ Quoted in *Ibid.*, 304.

²⁵ Quoted in Cook (2007, 104).

Recent historical surveys of fin-de-siècle musical decadence by Stephen Downes and Richard Taruskin²⁶ fail to focus on the rise in prominence of musical timbre as a decadent category, focusing instead on decadent subject matter, formal distortions of musical climax points, unusual harmonic progressions through chromatic neighbour chords (with Taruskin emphasizing the importance of the semitone) which initially seem exotic but become commonplace, and the use of filigree arpeggiations—found in much fin-de-siècle music—as comparative to the ornaments of numerous *Jugendstil* canvases. The excesses and distortions in each category are well-justified, but one important category is missing: decadent orchestration.

Karen Painter’s article ‘The Sensuality of Timbre: Responses to Mahler and Modernity at the *Fin de siècle*’ (1995)²⁷ discusses the response of conservative critics to the vibrant orchestration of Mahler’s music. Painter outlines their concern with the decadent “intrusion of sensuality into the abstract realm of music”, with music that “focus[ed] on momentary effect and detail [and] on sensual surface rather than on logical structure”.²⁸ Robert Hirschfeld, for example, in his 1900 review of Mahler’s First Symphony, felt there to be a sense of “disproportion between the ideas and their orchestral clothing”.²⁹ The use of surface-depth metaphors clearly links to the debate sparked by Loos’s argument against architectural ornament, on top of which the use of value-laden gendered terminology in much of the criticism (Hirschfeld, for example, continues with talk of “applying lipstick”³⁰) saw decadent orchestration “cast as cosmetics, clothing, or jewellery”, where “the outward appeal of *Klang* became antithetical to the ideal of inward, spiritual beauty through thematic invention”.³¹

If we return to one of Taruskin’s examples of the decadent in music—where he describes an unclassified harmony being returned to again and again (“fetishistically”,³² Downes suggests) until it sounds “normal”³³—it is possible to understand the concerns of contemporary critics discussing

²⁶ *Music and Decadence in European Modernism: The Case in Central and Eastern Europe* (Downes 2010), and the section entitled ‘Decadence’ in *The Oxford History of Western Music*, vol.IV (Taruskin 2005, 29-36).

²⁷ Painter (1995). See also her PhD thesis *The Aesthetics of the Listener: New Conceptions of Musical Meaning, Timbre, and Form in the Early Reception of Mahler’s Symphonies 5-7* (Painter 1996), from which the article is partly based.

²⁸ Painter (1995, 241, 237).

²⁹ Quoted in *Ibid.*, 242.

³⁰ *Ibid.*

³¹ Painter, *Ibid.*, 242.

³² Downes (2010, 9).

³³ Taruskin (2005, 31). The piano piece Taruskin refers to is Richard Strauss’s *Rêverie*, Op. 9, no. 4.

Mahler's novel orchestration. Whilst Taruskin fails to give any indication of what decadent orchestration might sound like, his striking image of a child at play with a construction set will serve to illustrate my point:

For a while, if intelligent and interested, or at least well-behaved, the child will follow the instruction book and connect the pieces “structurally”, producing the expected buildings and bridges. Later, however, in order to maintain interest, the child might start connecting the pieces with one another in ways the instruction book does not prescribe, creating weird shapes that have no practical application, but give pleasure (to the maker, at least). Really curious children might even stick the pieces in places their mothers might not care to hear about.³⁴

The ‘instruction books’ in our case were the orchestration manuals of the era. Wagner's orchestral style—at one point revolutionary—had by this point become accepted as part of the canon and something to be imitated (as illustrated by its prominent inclusion in Strauss's 1904 revisionist-expansion of Berlioz's orchestral treatise). However, Mahler's orchestration was still striking in its novelty; from a conservative standpoint Mahler was clearly ‘putting the pieces together’ in a non-prescribed way. The underlying fear was not so much that Mahler's music transgressed such boundaries, but that the transgression of such boundaries would become normative. Were such a development to take place, pleasure from a parameter considered secondary and ornamental would become widespread and socially acceptable — a decadent situation that conservative musical figures seemed keen to avoid in order that music's ‘intellectual’ qualities remained paramount.

Leon Botstein's thesis *Music and Its Public: Habits of Listening and the Crisis of Musical Modernism in Vienna, 1870-1914* (1985) outlines another contributing factor to this trend amongst conservative voices of the fin-de-siècle era: a rather negative evaluation of Viennese audiences' musical aptitude, with Hirschfeld, for example, suggesting “motivations were social [and] habits of hearing were associative at best”.³⁵ Botstein details what a number of these critics and those within more conservative musical institutions saw as their moral duty to “cultivat[e] the Ideal listener”³⁶ against sensuous, associative listening, and, with particular reference to Mahler, against his impassioned

³⁴ Ibid., 36. Downes also cites this example in support of an argument toward formal decadence. See Downes (2010, 8-9).

³⁵ Quoted in Botstein (1985, 1008). Botstein's more recent article ‘Listening through Reading: Musical Literacy and the Concert Audience’ (Botstein 1992) presents a condensed form of many of the issues discussed in the extensive fourth chapter of his thesis.

³⁶ Chapter 4 of Botstein's thesis is entitled ‘Cultivating the Ideal Listener: Theories of Musicality at the Turn of the Century’ (Botstein 1985, 988-1017).

conducting and orchestral alterations of Beethoven's symphonies, which in their view encouraged a dangerous "exaggeration of surface color" and which seem to encourage a 'passive' approach to listening as a consequence.³⁷

Mahler, then, appears as a key figure in early fin-de-siècle Viennese timbral criticism—criticism of a sensuous and intoxicating musical surface that shows clear parallel with the criticism of ornament by Loos and others—and as an influential figure and early focal point for the generation of Viennese composers that followed: Schreker, Schoenberg, Zemlinsky, Berg, and Webern. That is not to suggest that Mahler's music provides an easy point of comparison with the composers listed above, but rather that many of the implications that arise from fin-de-siècle Mahler reception frame and anticipate much of the discourse that follows when discussing the value of timbre in the music of Franz Schreker.

Painter's discussion of the perceived "sensuality" and "physical response" found in Mahler's music—the "association of sonority, *Klang*, with nervous excitation"—and the claim that such scoring left "listeners *unable* to experience musical logic", suggests that the assumed hierarchy within "the traditional mind-body dichotomy" is being challenged by this timbrally rich music.³⁸ Painter's work gives the overriding impression that timbral excitation was seen as a negative aspect—one of passive, rather than active listening—but her impression is also of a rather conservative, one-sided account of fin-de-siècle response to musical orchestration.

John J. Sheinbaum's writings present a more critical-theoretical approach to the use of timbre in Mahler's music. His thesis examines timbre's structural role, in some senses repudiating the value judgements of the musical criticism highlighted in Botstein and Painter's surveys. The 'outsider' status he gives to timbre derives from Theodor Adorno's categories of 'breakthrough' [*Durchbruch*], a moment of rupture in the musical structure; 'suspension' [*Suspension*], a section in which musical processes appear to be put on hold; and 'fulfilment' [*Erfüllung*], an unexpected moment of conclusion.³⁹ In each of these three categories, timbre, as much as pitch, is the prominent contributing parameter. It is the 'outsider' status given to timbre that proves to be important:

³⁷ Ibid., 1146.

³⁸ Painter (1995, 236, 237, 238, 239).

³⁹ Adorno's three categories are taken from *Mahler: A Musical Physiognomy*, chapter 3: 'Characters'. See Adorno (1992, 40-59). For Sheinbaum's discussion see the final chapter of Sheinbaum's PhD thesis (Sheinbaum 2002, 260-362), or his more recent article (Sheinbaum 2006).

whereas Painter and Botstein's conservative critics saw the separation of timbre and form negatively, Sheinbaum's reading of Adorno's *Mahler* sees this as a potentially *positive* aspect.

It is important to note that Adorno's formal categories do not replace traditional ones, like "sonata form", but function within, interact with, and critique those conventional shapes.⁴⁰

The interaction of the three 'character'-full categories with that of form thus raises the potential status of timbre and orchestration to a *functional* parameter, rather than one of ornamentation. Adorno's post-war musical criticism focuses on fin-de-siècle Viennese composition, and at its core there is a strong similarity to contemporary Viennese discussions of timbre as an 'external' and secondary parameter. However, it is the *positive* perspective which Adorno puts on this that is a revolutionary moment in timbral criticism: whilst he adheres to and critiques the notion of form as deep and timbre as surface, Adorno's writings suggest that it is precisely because timbre can be distinguished from other formal categories and is classed as an 'outside' parameter that it can then 'intrude' upon the musical narrative (both expressively and also structurally). For Adorno, timbre's strength is that it can, through the three categories above, offer an immanent critique of standardised structures or easily-consumed 'commodity' pieces.⁴¹ Despite the immanence of Adorno's hermeneutic standpoint, however, timbre must still be considered secondary in status, or at least as 'other'—as an external parameter (hence Sheinbaum's use of the term 'outsider')—so that it can be heard to have an impact *upon* the other musical parameters. Adorno's criticism often identifies timbre in fin-de-siècle Viennese music as a central concern, but his work is still grounded in the internal-external dichotomy described above. Nevertheless, Adorno remains one of the first substantial critics to highlight timbre as capable of fulfilling a hermeneutic function within this type of music: the implications of his work will be discussed more fully in chapter 2.

In addition to Adorno's writing, the importance of timbre in Mahler is emphasized in Julian Johnson's 2009 volume *Mahler's Voices*⁴² by raising a number of interesting questions regarding music's 'voices' that are often centred around Mahler's orchestral usage: issues of solo and collective voices;⁴³ the lyric versus the narrative voice;⁴⁴ orchestration's power to 'analyse' and fragment the

⁴⁰ Sheinbaum (2002, 267). Sheinbaum directs our attention to Adorno (1992, 41-2).

⁴¹ See discussion in Paddison (1993, 54-55).

⁴² Also, Johnson's *Webern and the Transformation of Nature* (1999) shows an interest in highlighting instrumental importance in Webern's musical evocation of nature topoi.

⁴³ Johnson (2009, 7).

musical surface and to oppose counterpoint's integrating tendency;⁴⁵ as well as Mahler's disregard for the principles of "good" orchestration.⁴⁶

The strength of these writings is that their analytical observations are not formed in an ahistorical vacuum, but rather that they are contextually grounded in the contemporary Viennese reaction to Mahler's music, highlighting the fact that it had become harder to disentangle the orchestral aspect of his music from the thematic material, and that his sound-world caused a problem for many and raised questions for others (as Botstein and Painter clearly document). It seems problematic, therefore, that in his book *Closure and Mahler's Music: The Role of Secondary Parameters* (1990), Robert G. Hopkins advances an analytical model that relies on placing each 'secondary' parameter on a linear scale; because timbre eschews this model, Hopkins chooses to marginalise it in his discussion.⁴⁷ In light of the controversial, but important, role of timbre in fin-de-siècle Viennese music, it seems erroneous for Hopkins to examine the highly-orchestrated music of the fin-de-siècle period without including a detailed discussion of the role of timbre in musical form. Given this historical context, Sheinbaum's criticism of Hopkins' omission seems entirely justifiable, suggesting that timbre should be seen as:

a parameter of flexible importance; it is neither solely 'primary' or 'secondary'. Instead, it is an aspect to be explored [allowing] for the possibility that timbre can range from being very important to unimportant in a given context, and that it can range from working with to working against other parameters.⁴⁸

The variable importance of timbre is just part of the realisation that perhaps all the parameters of music should be viewed in this way — as a mesh of constantly evolving interrelationships, each parameter fighting to be the direct focus of attention. Fin-de-siècle conservative criticism might appear to paint the situation as a binary opposition for the purpose of rhetoric (e.g. Alma Mahler's composition teacher, Josef Labor, once remarked that "R[ichard] S[trauss] is one of our most talented young musicians, but he squanders his vast ability by eschewing melodic line, and concentrates

⁴⁴ Ibid., 13.

⁴⁵ Ibid., 28, 40.

⁴⁶ Ibid., 34.

⁴⁷ Hopkins suggests that Mahler often affects closure, not in the traditional sense using the 'primary' parameters of pitch, harmony and rhythm, but by using music's 'secondary' parameters. Whilst Hopkins ranks timbre amongst these secondary parameters, he devotes only two pages of the book to it specifically (56-7) suggesting that, although the mind perceives its effects, "timbre is not important for closure" (57).

⁴⁸ Sheinbaum (2002, 14).

instead on the magic of orchestral colour. It's a crying shame."⁴⁹). However, it is extremely rare to find a fin-de-siècle composer who consistently places orchestral colour as the most prominent parameter throughout the entirety of a piece, and instead it is the contrast and juxtaposition of individual moments of timbral prominence within their musical context that will prove analytically insightful.

One of the topics at this thesis's core is the musical sound-world of Franz Schreker, whose renown as a *Klangkünstler*, with his committal to variegated timbral construction and moments of intense orchestral colouration, makes him an ideal candidate for closer discussion and analysis.⁵⁰

Schreker's mastery of the orchestra, according to Christopher Hailey,

added new colors and sonorities beyond Debussy [and] possessed an orchestral mastery and technical virtuosity equalling, if not surpassing, Strauss[. He had] a dazzling orchestral technique capable of the greatest realism, and an obsession with color and impressionistic effects [mingling both] the "new German" and "new French" schools. [As] a consequence Schreker's music also drew the criticisms levelled at these styles; it made him enemies on the basis of association.⁵¹

Schreker's opera *Der ferne Klang* (premiered at the Alte Oper in Frankfurt, on 18 August 1912) gave symbolic and musical prominence to sound itself: "The iridescent Schrekerian sound",⁵² as Adorno described it, becomes a hallmark of this period, both in his later opera *Die Gezeichneten* (1911; 1913-5),⁵³ and in the opening bars of his *Kammersymphonie* (1916) (see figure 1.1). *Klang* is a term rich in meaning, and difficult to translate, but it is precisely this rich meaning that starts to describe the Schrekerian sound above: "in Schreker's music", Hailey writes, "[*Klang*] usually refers to a combination of orchestration (subtle doublings and instrumental effects) and harmonic ambiguity (sonorities with two functional roots, added non-harmonic tones, indefinite bass)"⁵⁴ — the dissonance of these mixed harmonies is often softened through Schreker's timbral configuration, and in figure 1.1 we see this mixture of musical parameters taking place. Critics often responded to

⁴⁹ Mahler-Werfel (1998, 216).

⁵⁰ The term *Klangkünstler* is (as far as I am aware) my own construction, but the fourth chapter of Christopher Hailey's *Franz Schreker (1878-1934): a cultural biography* provides ample evidence that many contemporary critics viewed Schreker in such a way. See, especially, pp. 49-53. For example, one critic remarked of Schreker's *Nachtstück*, in 1909, that "there are combinations of sounds in this work the likes of which have never been heard before". Of the later première of *Der ferne Klang* another critic remarked of its "sonic-magic", and another of sound mixtures that "are nothing short of unprecedented" (51).

⁵¹ Hailey (1993, 45).

⁵² Adorno (1998, 132).

⁵³ Premiered in Frankfurt, April 1918.

⁵⁴ Hailey (1993, 49-50).

the Schrekerian *Klang* in much the same way they had done to the vibrant orchestral passages in Mahler's music. For example, Alexander Berrsche of *Die Musik* wrote that:

one hears even harmonic and melodic configurations that can be retained in memory only as *Klangfarben*[.] Schreker intentionally places the musical listener in the situation of the unmusical listener. We must listen to him as the unmusical listen to everything. If we listen to him in any other way we do him injustice. And if someone said that the consequences [thereof] must necessarily lead to the end of music, that is of course correct.⁵⁵

(Review of *Der ferne Klang*, Munich, Apr. 1914)

The problem—that moments of Schrekerian *Klang* left the musically-educated critic in the situation of the 'unmusical listener'—can be seen to represent a situation of deeper concern in early twentieth-century music criticism. The situation that Berrsche describes prompted a *crisis of response*. When faced with such music, conservative critics seemed to adopt two main modes of reply: 1) that of moment-by-moment *description* — to produce unsatisfactory 'criticism' that the 'unmusical' could have produced themselves; or 2) to be *dismissive* — to be critical of this type of music in listing its purported deficiencies (its over-stimulating surface on the one hand, and perceived lack of substantive material on the other), and the associative-passive mode of listening it encouraged, thus seeming to retain a higher moral stance and fighting against the path that led 'to the end of music'. An example can be seen in another Munich review of *Der ferne Klang*, in which the (unnamed) author remarks that whilst the "composer took numerous curtain calls[,] the work's effect is purely superficial, derived from its clever orchestration".⁵⁶

Returning to figure 1.1 and the opening of Schreker's *Kammersymphonie*, the orchestration can be heard to function in a way that is not just 'superficial' because it functions in tandem with Schreker's harmony and also gives a sense of narrative movement. The harmony in the first 3 bars is based around a C#/D^b major triad, with the second half of each bar a mix of major and minor (the added E-natural). The semitone is a prominent interval here (C#-D in the first half of each bar; C#-D, E-F in the second half; and in bar 3 an additional G#-A clash is added from the entry of the violins). However, the intensity of these potentially very dissonant clusters is lessened through their timbral presentation. Each instrument is timbrally at its lower threshold, i.e. Schreker's choice of dynamic markings, pitch and tessitura has created a timbre from each instrument that lies on the threshold of

⁵⁵ Quoted in Painter (1995, 239) itself adapted from Hailey (1993, 53).

⁵⁶ Quoted in Hailey (1993, 52).

audibility and which lessens the intensity of the dissonance. The sustained C[#]-D in the harmonium part, for example, would be extremely dissonant if it were sustained at its loudest dynamic setting. Here, 'timbre' is to be understood not merely as the particularly quality of tone in its strict definition, but as an *emergent* quality, by which I mean that timbre should be heard as an emergent property of an instrument's dynamics/pitch/tessitura. Schreker also orchestrates these semitonal differences in a variety of ways (semiquaver trill in the celesta; sustained dissonance in the harmonium; spread arpeggiations in the piano) so that the dissonance fluctuates in intensity in a way that would be difficult to recreate on a single instrument. In the opening 2 bars each of the instrumental timbres is both distinctive enough to establish, at times, separate points of origin for each sound, but also similar enough to blend as a semi-homogenous group. In bar 3 and 4 the violin's contrasting timbre and dissonant entry are set in counterpoint to the flute melody and fluctuating accompaniment until, in bar 5, a more homogenous string group joins in alongside interjections from oboe and clarinet. The sense of narrative progression is driven in this opening by its timbral construction: at the start a static harmonic framework and flute ostinato melody force greater attention on the timbral elements than might normally be the case, and in the absence of strong melodic/harmonic material the narrative progression is one of an increasingly tangible sense of dialog between the instruments. At first the dialogue is one of subtle fluctuations, then between flute and violin, then in bar 5 the interjections are more frequent and imitative against a more stable harmonic background (although the harmony in bar 5 still contains one semitonal dissonance (F-F[#]) it is not presented as timbrally fluctuating as was the case in bars 1-4). There is no doubt that Schreker has been precise with his choice of instrumentation, but to suggest that it is merely sensual or ornamental is to fail to understand the effect of timbre in this opening passage. As an analyst, it is important to recognise that certain harmonic or rhythmic elements are not always significant, and the same is frequently true of timbre. However, in fin-de-siècle Viennese music, where the timbral element rises to prominence, rather than dismissing it (as contemporary critics frequently did) as sensuous Schrekerian '*Klang*' whose value lies only in its hedonistic value, we need to develop a more nuanced and sensitive approach to timbre as an emergent property. This can be achieved in a similar fashion to Adorno's 'positive discrimination'—asking *how* timbre functions with/against other parameters, or by asking whether timbre *can* be separated from the other parameters at certain moments. In this

particular passage, I would argue that the answer is ‘no’: timbre in this instance does not just ‘give voice’ to the musical idea, but is an integral *part* of the musical idea. Here again is an example where the fin-de-siècle notion of the musical idea has developed to include timbre as an essential constituent.

The problematic status of timbre, fostered at the beginning of the twentieth century by much Viennese music and its criticism (and the great attention paid to its discussion), encourages the notion that timbre’s role is not merely ‘superficial’, but rather—through its often immediate sensuality—has the ability at certain moments to become the most prominent parameter. Returning to Sheinbaum’s characterization of timbre as a ‘parameter of flexible importance’, there is a sense of underlying concern in many of the conservative critics’ remarks that timbre, far from being *ornamental*, had at certain moments become *fundamental*. Whilst the subtext of many critics’ comments emphasized timbre’s superficial nature in fin-de-siècle Viennese music, this clearly was not the case, as can be inferred from the spirited nature of the discussion it engendered.

The key word here is organicism. From Loos to Schenker to Hirschfeld, each focused on the fact that ornament should develop from the material itself, never to dominate, as an essential and inseparable element. Botstein’s thesis highlights the lofty pedestal onto which Classical and Baroque music were placed at the turn of the century by Viennese middle-class concert-goers, much of which stemmed from a sense of pride in their country’s rich musical heritage. In this music ‘good’ orchestration aimed toward clarity of ideas, balanced grouping, refinement of sound, and dynamic contrast.⁵⁷ Approaching the music of the fin-de-siècle—where the ‘art of orchestration’ had developed drastically—with this set of classical ideals would clearly result in a discrepancy in appreciating certain composers’ use of the orchestra if their idea’s timbral profile had become equally as important as its melodic-harmonic attributes. Ironically, despite the accusations of ‘excess’ and ‘ornamentalism’, the modern style of orchestration was in many ways *more* organic than that of the earlier eras — it had become more integral to and less separable from the musical ‘ideas’ put forward in pitch and rhythm. To remove the orchestration in certain moments of Mahler or Schreker or Berg, for example, would be to remove much of what was essential for the music’s effect. In moments such as this, the underlying assumption from the conservative critic faced with the ‘crisis of response’

⁵⁷ Botstein (1985), particularly chapter 4.

outlined above would be consternation at the lack of musical ideas in the traditional sense. However, the definition of the musical idea was clearly becoming more fluid. This is the crux of the problem emerging from Vienna's mixed musical *milieu*: how to respond to and interpret the increased variety of music's orchestral construction — variety that was clearly engendering partisan debate. This thesis takes that problem as its core.

In its attempt to understand the dominant responses to timbre and orchestration in fin-de-siècle Vienna, this chapter must ask the question: what were the primary outlets for such responses? The answer proposed here is threefold: the contemporary orchestral treatise; the discussion surrounding the 'un-orchestral' piano transcription; and the language of contemporary concert reviews. Accordingly, the rest of the chapter is divided into three sections which address each of these areas in turn, building on the ideas that have been introduced so far: the role of the orchestral treatise in musical *construction*; the role of the piano transcription in musical *reception*, and, finally, a musical case study that analyzes the varied contemporary responses found in the concert reviews of Schreker's *Kammersymphonie* (a literature which has not been explored, or translated into English, despite the work being one of Schreker's most frequently performed pieces). The general trends and themes that emerge from these discussions will then form the basis of the historically-grounded analyses that follow later in the thesis.

Figure 1.1 — The opening bars of Schreker's *Kammersymphonie* (1916)

KAMMERSYMPHONIE.

Langsam, schwebend. Franz Schreker.

Flöte. *ppp*

Oboe.

Clarinette in A.

Fagott.

Horn in F.

Trompete in C.

Posaune.

Pauken u. Schlagwerk.

Harfe. *pp Flag.*

Celesta. *pp*

Harmonium. *ppp*

Klavier. *pp*
(Versch.)

Langsam, schwebend.

1. Violine.

2. Violine.

3. Violine.

4. Violine.

1. Bratsche.

2. Bratsche.

1. Violoncell.

2. Violoncell.

3. Violoncell.

2 Bässe.

Universal Edition UE 6032

Fl.

Ob.

Clar. in A.

Hr. in F.

Hfe.

Cel.

Harm.

Klav.

1.Vl. *pp* (Solo) (Sord.)

2.Vl. *pp* (Solo) (Sord.)

3.Vl. (Solo) (Sord.) *pp*

4.Vl. (Solo) (Sord.) *pp*

1.Br. (Solo) (Sord.) *pp*

2.Vlc. (Solo) (Sord.) *pp*

3.Vlc. (2 Soli) (Sord.) *pp*

1.1.1 — Orchestral Treatises: a dangerous ‘craft’

By the turn of the century the use of the orchestra had, following Wagner’s innovations, become a highly sophisticated and refined art. Technical developments and increased orchestral numbers allowed composers unparalleled access to a vast timbral palette. The orchestral treatise serves as an important document regarding instrumental development of the fin-de-siècle. Clearly intended to put forward examples of ‘ideal’ orchestration, treatises serve the purpose (in one sense) of highlighting particular musical moments of past masters, whose work had been accepted into the canon. In another sense, they give valuable insight into the views of those who wrote them—often established composers themselves—and offer direct discussion of the details of orchestration, intended primarily for the musician-composer.

John Sheinbaum offers an in-depth discussion of much of the Germanic and English literature available in the second chapter of his thesis, entitled “‘Innovation is Looked on as Madness or Crime’: fin-de-siècle discourse in turn-of-the-century orchestration treatises.”⁵⁸ This section of the chapter is intended both as a summary and an extension of those ideas, building on the foundations laid by Sheinbaum. As Sheinbaum notes, treatises tend to “read as straightforward, ‘objective’ texts”, and yet, “although they do not give the impression that they are rife with anxieties of the time, a reading attuned to these issues suggest that such tensions are present to some extent even in these admittedly technical guides”.⁵⁹

Sheinbaum’s chapter address three concerns: 1) the effect of timbre on ‘pure’ music (by which he means non-programmatic music or music without an explicit narrative or plot); 2) ‘gendered’ instruments; and 3) ‘otherized’ instruments. The last two categories discuss traditional rhetoric of the time: with regard to gender, there is seen to be a binary opposition between “strong and firm” attributes and those that are “soft and pleasing”;⁶⁰ regarding ‘otherization’, there is discussion of instruments, such as the viola (seen as a distorted version of the violin),⁶¹ or the discussion of ‘purity of tone’, regarding valved brass.⁶² The theme common to all three of Sheinbaum’s sections is that of

⁵⁸ Found in Sheinbaum (2002, 70-105).

⁵⁹ Ibid., 73.

⁶⁰ Ibid., 88.

⁶¹ Ibid., 97ff.

⁶² Ibid., 100ff.

the first: the perceived potential for the degradation of ‘pure’ music through the misuse of timbre — an idea that underlies much of the language found in the various treatises,⁶³ and echoes the sentiments found in contemporary reviews, sentiments that likely stem from the perceived dichotomy in Central European music between programmatic and absolute music. For example, this partisanship still seems evident in later writings by Egon Wellesz, a student of both Schoenberg and Guido Adler in Vienna. In his treatise entitled *Die neue Instrumentation* (1928)—sections of which I have translated for the first time below—Wellesz writes that:

...we must never forget that the instrumentation is just the means of [giving] external form [to the] musical ideas, [and] must never become an end in itself.⁶⁴

...failure in the construction and deficiencies of invention can be concealed through skilful and effective instrumentation...nothing ages quicker than a colourful effect, which is not sufficiently carried by strong form and content.⁶⁵

Whilst his treatise discusses a wide variety of musical styles, including composers such as Mahler and Strauss (and numerous others, including Schreker, who had not come to prominence at the time of earlier treatises), the essential drive throughout Wellesz’s writing is that outlined above — that the musical idea is more important than its external form. As an appropriate reaction to the excesses of the large orchestra Wellesz’s treatise advocates the move to the condensed chamber style⁶⁶—its “transparent” style suitable for the presentation of “ideas of a smaller format”⁶⁷—and to the reduced, and less subjective means of *Neue Sachlichkeit*. Whilst Wellesz’s treatise dates from a later point, when the compositional trend was toward more compact ensembles and an economy of expression, we readily see concerns that appeared in treatises from the earlier decades of the twentieth century. There is still the idea, as Sheinbaum writes, that “the timbral resources of the orchestra are enticing, but potentially ruinous” to the pure character of musical art, and, by implication, wider society.⁶⁸ We

⁶³ See *Ibid.*, 75-87.

⁶⁴ “Denn man darf nie vergessen, daß die Instrumentation nur ein Mittel der äußeren Gestaltung der musikalischen Ideen ist, nie Selbstzweck werden darf...”, in Wellesz (1928, 42). Sheinbaum mentions Wellesz’s writing but does not discuss this aspect of his writing, nor quote him in any great detail.

⁶⁵ “Scheinbar und fürs erste lassen sich ja sogar Fehler im Aufbau und Mängel der Erfindung durch eine geschickte und wirkungsvolle Instrumentation verdecken, aber nichts veraltet...schneller als ein farbiger Effekt, der nicht von genügend starken Form- und Inhaltswerten getragen ist.”, *Ibid.*

⁶⁶ For example, Wellesz remarks on Strauss’s “breakthrough” in the reduced orchestra of *Ariadne auf Naxos* (Wellesz 1928b, 46).

⁶⁷ “Die kammermusikalische Schreibart führt zu einer durchsichtigen Schreibart...”; “Die Ausbildung des neuen Kammerstiles gibt aber den Musikern die Möglichkeit, für Ideen kleineren Formates sich der entsprechenden instrumentalen Darstellungsform bedienen zu können...” in Wellesz (1928, 41).

⁶⁸ Sheinbaum (2002, 75).

also see that Wellesz's standpoint is strictly against the changing conception of the musical idea as demonstrated in moments such as the opening of Schreker's *Kammersymphonie*, where timbre has such a prominent function.

In the preface to his revised orchestral treatise, Richard Strauss writes that the “phenomenal sound combinations” of a Berlioz or a Wagner “must not be misused”,⁶⁹ or overused, “otherwise the ear of the listener becomes unnecessarily dulled” — they must be supported by form and idea, otherwise they should be “replaced by simpler ones”.⁷⁰ Both Strauss and Wellesz warn of the dangers of orchestral misuse, but the main difference between them is that Strauss clearly views orchestration as part of the musical idea, whereas Wellesz make a clear distinction between the two. Here Wellesz perpetuates the fin-de-siècle Viennese concerns over decline in thematic invention, positioning the act of orchestration as an after-thought rather than the integral part of the composition process it had become for many of Vienna's composers.

Strauss also ventures to discuss a repertoire that many considered a Viennese benchmark as far as ‘acceptable’ orchestration was concerned: that of the Classical masters. Strauss writes:

The symphonic works of these two masters [Haydn and Mozart] reveal in their style, in their themes, melodies and figurations the character of the string quartet with all its polyphonic possibilities. One might almost call them string quartets with obligato wood-wind and noise instruments to reinforce the tutti (French horns, trumpets, kettledrums).⁷¹

For Strauss the added parts are merely decorative (‘noise’) and serve only to emphasise the important areas, doubling or padding-out harmonies where this is required. Here he suggests that the specific choice of instruments outside the string family, which had not yet fully gained independence, was of little consequence because their role was not for their character, or particular tone quality, but rather to reinforce the loud orchestral tutti and to provide a contrast to the string sound. Strauss's entire comment has a rather Hegelian thrust — that only ‘now’ has music managed to progress beyond what he views as a more primitive state of orchestration, and that such resources should be used and developed to their full potential. He does, unlike Mahler, stop short of suggesting that these works— in the light of continuing orchestral developments—should be ‘improved’. Mahler's ‘retouchings’ of

⁶⁹ Strauss in Berlioz (1991, II, III).

⁷⁰ *Ibid.*, 144.

⁷¹ *Ibid.*, I-II.

Beethoven's scoring found particularly frosty reception from certain quarters in this regard: after a performance of the altered *Eroica* "E. Th." wrote

Yes, Herr Mahler has E^b clarinets on the brain. Not content with adding one to the *Eroica* he has also reinforced the trombones and double basses, and it is even being said that he will send his brother-in-law to Jericho to rediscover Joshua's trumpet, because Aryan trumpets are not loud enough for him.

...The orchestra is preparing to hold the forthcoming rehearsals of the *Eroica* on the Steinfeld, so that Mahler can employ the field artillery with some guns to reinforce the kettledrums.⁷²

Beethoven criticism does not often praise the composer's restraint, and that is what makes this particular review (with its clear indication that Mahler's orchestral 'forces' are excessive and capable of military-grade destruction) even more pertinent. Whilst the viewpoint cannot be completely divorced from the anti-Semitic sentiment it contains, 'E. Th' was not the only patron to react strongly against Mahler's orchestral additions. Importantly, what Strauss highlights in the Berlioz treatise is a fundamental shift in the way some composers had started to approach orchestral composition during the later nineteenth century, away from the viewpoint that Wellesz would continue to perpetuate, and toward an instrument-centred conception of the musical idea — not just 'obligato' reinforcements or 'misused' sound combinations, but timbre that supports (or is supported by) the musical idea.

The orchestral treatise, with its musical quotations, and examples of what is playable on each instrument, puts forward the notion that what is acceptable is that which is 'beautiful'. Rimsky-Korsakov's influential treatise puts forward the same argument — namely, that 'good', 'beautiful'-sounding music, with balanced spacing, and due prominence assigned to the correct parts, is ideal. Rimsky-Korsakov gives two 'fundamental axioms' in this regard:

- I. In the orchestra there is no such thing as ugly quality of tone.
- II. Orchestral writing should be easy to play.⁷³

Given these two axioms, it is not surprising that he believes an ugly quality of tone fails to exist, for in following the second axiom, many an 'ugly' sound is removed — difficult parts invoke physical and mental strain, and by removing this strain each player can concentrate on creating a beautiful tone.

⁷² *Deutsche Zeitung*, 4 November 1898, quoted in Marković-Stokes (2004, 1).

⁷³ Rimsky-Korsakov (1964, 3).

If we refer back to the Schreker *Kammersymphonie* example, however, we see that the music is not particularly ‘easy to play’, but neither is it what I would suggest Rimsky-Korsakov would describe as ‘ugly’. Throughout the various orchestral treatises it seems that timbres which are heard as ugly are often equated with harshness of tone, or with a sense of instrumental *strain* or excess. Harshness of tone is, according to Hermann von Helmholtz, equated with the upper extremes of instrumental register and dynamic levels, due to the increased presence of upper harmonic partials,⁷⁴ alongside the increased presence of instrumental ‘noise’ created at these extremes, and the physical effect this has on the ear. That treatises never encourage the use of extreme tessitura or dynamics is evidence of this, as is the fact that most offer advice to get beyond the *physical* limitations of each instrument to create music free from clicks, scrapes, and squeaks. Each treatise offers limits that should not be transgressed for the sake of purity of sound. For example, Henri Kling in his *Populäre Instrumentationslehre* (1888) writes

A person of taste must always remember that every exaggeration is a mistake; and it may certainly be termed an exaggeration to demand productions which are entirely contrary to the real character of the instrument.⁷⁵

The orchestration treatise embodies a tension in fin-de-siècle Viennese music — on the one hand, it encourages good, pure, orchestration. On the other, we see Strauss in his 1904 preface to the Berlioz *Treatise*, criticising such ‘pleasant’ orchestration, and encouraging experimentation (within limits):

In the art of instrumentation, as in other arts, the question of theoretical books is highly problematic[.] A musician with talent for composition, who plays [an] instrument in an orchestra, will have more skill in instrumentation (without any knowledge of its theory) than the equally gifted pianist or music critic who has diligently studied textbooks, but has never come closer to orchestral instruments than the first row of a concert hall.

[I]f a student wants to achieve more [...] than just writing a few pleasant-sounding pieces (‘excellently scored’, as our critics would call them), [he should] above all ask instrumentalists of all kinds to familiarize him with the exact technique of their instruments and with the timbre of their registers.⁷⁶

This sense of experimentation seems important for Strauss: he suggests that what is truly required is for the composer to ‘familiarise’ themselves with the *physical*, not theoretical, properties of each

⁷⁴ Helmholtz (1885, 204-211) discusses the role of increased prominence of upper partials and dissonance, in relation to ‘quality of tone’.

⁷⁵ Quoted in Sheinbaum (2002, 77-8).

⁷⁶ Strauss in Berlioz (1991, I).

instrument. The tone of Strauss's preface intimates that what follows in the treatise proper is a list of 'correct' orchestrations, but that the expert composer must move beyond this and familiarize themselves and experiment with(in) the timbral boundaries of each instrument to find its particular limits. To do this, Strauss suggests that they must enter the orchestral pit and remove the sense of distance the listener inevitably feels (and sometimes requires) when in the audience; they must see, hear, and feel the mechanics of the orchestra in motion so that they can push their instruments further. In the second paragraph quoted above, it is explicit that Strauss is not just asking for 'pleasant-sounding' instrumental usage (moving away from the two orchestral treatises quoted so far, and also from much of what is contained within the Berlioz treatise itself) but that the complete tonal palette of each instrument is discovered so that greater use of this (including the 'ugly' or strained timbral aspects) can be made. Mahler's similarly modernist drive to develop instrumental capacity beyond the textbook is clear from his remark to Natalie Bauer-Lechner:

If I want to produce a soft, subdued sound, I don't give it to an instrument which produces it easily, but rather to one which can get it only with effort and under pressure — often by forcing itself and exceeding its natural range [...] the basses and bassoon squeak on the highest notes [...] the flute huffs and puffs down below.⁷⁷

The tension then is that the orchestral treatise must be seen to encourage good orchestration, but the modernist drive is toward developing and pushing orchestral sonority to its limits, and providing unusual effects and *character* (the "bleating high tones" of the oboe, or the "*epic...heroic*" nature of the clarinet, that Strauss describes)⁷⁸ — often requiring, as Mahler shows above, a composer to go directly against the guidelines certain treatises provided. Strauss simultaneously proposes a normative timbral approach via certain parts of his orchestral treatise, which he then appears to subvert or exceed in others.

Like Mahler and Strauss, much of Schreker's music subverts or exceeds these orchestral ideals through fine-detailed attention to scoring, attracting criticism as a result. By the early decades of the twentieth century, the task of orchestration had become a technical art that required mastering. For example, Max Kalbeck wrote that the Adagio and Scherzo of his First Symphony "betray more the master of *technique*, the shrewd orchestral thinker, rather than the musical inventor and writer of

⁷⁷ Mahler quoted in Sheinbaum (2002, 70).

⁷⁸ Strauss in Berlioz (1991, 176, 209). A number of Strauss's additions are of this nature, and we often see such characterisation in his programmatic writing.

musical themes”.⁷⁹ Adorno wrote of the “insatiable, loving devotion” with which Viennese composers “pottered” and “refined the details in their scores, as if they were polishing, cleaning or sanding furniture”.⁸⁰ Here Adorno relegates, like Wellesz, the act of orchestration to a craft, as beneath the art of melodic and thematic invention. Adorno is making reference to the debate surrounding the *Wiener Werkstätte*, established in 1903 as a manufacturing guild of craftsmen and off-shoot of the Vienna Secession art movement. The Secession declared in their opening manifesto: “We do not recognise any difference between ‘high art’ and ‘lesser arts’”, which, as Simon Shaw-Miller acknowledges, was “a declaration to reform both art and craft”, with craftwork exhibited equally alongside fine art in the Secession’s exhibitions.⁸¹ Whilst Adorno suggests that “In general the superiority of art to craft [...] should not be taken for granted” he does continue to characterize the act of orchestral refinement, as “the unserious and unfree expenditure of labour on material remote from the mind”.⁸² Again suggesting that the musical idea can or should be split into two contrasting components, the ‘intellectual’ core and the subordinate, less ‘serious’ orchestral element.

From Mahler’s comments and Strauss’s warnings, it is clear that they too see orchestration as a technical skill or craft requiring mastery — the difference being that, like the Secession movement, they do not view such ‘crafting’ as secondary, but in many ways integral to the development of exciting new musical ideas. It was this lack of distinction between the ‘high art’ and ‘lesser craft’ that left many concerned for the future development of music.

The prominence of this ongoing debate regarding the status and development of timbre in music bore Viennese fruit if we once again return to Arnold Schoenberg’s *Harmonielehre*. As discussed, above, at the start of this chapter, the fact that Schoenberg chose to end his textbook on harmony with a discussion of *timbral* development, suggests that for him timbre was no secondary parameter, but one that had yet to be developed. For Schoenberg, in 1911, this was still a “futuristic fantasy”,⁸³ but one where he was marking out a new modernist direction for timbre, and justifying its status:

⁷⁹ My emphasis. Quoted in Knittel (2010, 102).

⁸⁰ Adorno (1998, 211) taken from his essay entitled ‘Vienna’ (1960).

⁸¹ Shaw-Miller (2009, 26).

⁸² Adorno (1998, 211).

⁸³ Schoenberg (1978, 421).

The evaluation of tone color (*Klangfarbe*), the second dimension of tone, is thus in a still much less cultivated, much less organized state than [harmony]. Nevertheless, we go right on boldly connecting the sounds with one another [...] simply by feeling[.]

[However], the distinction between tone color and pitch [...] I cannot except without reservations [as] tone becomes perceptible by virtue of tone color, of which one dimension is pitch. Tone color is, thus, the main topic, pitch a subdivision. [If] it is possible to create patterns [...] according to pitch [...] then it must also be possible to make such progressions out of the tone colors [whose] relations with one another work with a kind of logic entirely equivalent to that logic which satisfies us in the melody of pitches [these *Klangfarbenmelodien*] will bring us closer to the illusory stuff of our dreams[.]⁸⁴

Schoenberg hence explains why one of the main difficulties with timbral analysis is that it is an emergent property based on a number of music's other parameters, such as pitch (and dynamics). This emergent quality accounts for part of the difficulty of Schoenberg's quest for *Klangfarbenmelodien*. Even in the present, the 'logical progression of tone colours' proposed by Schoenberg has proven (outside the realm of electroacoustic music, at least) an elusive goal. However, we can see in composers such as Schreker and Mahler the desire to make *Klangfarben* a meaningful parameter; to imbue it with a significance beyond that of the solely decorative, and to identify it as a parameter worthy of 'modernist' development.

The late nineteenth century saw the institutionalisation of Austro-German academic musicology, with the notion that music theory "had to be scientific" to be accepted,⁸⁵ and which would eventually create a musicological standpoint that composers such as Schoenberg would use to legitimate compositional theories in the spirit of fin-de-siècle modernism and progress. Hugo Riemann's view that "music theory belongs among the natural sciences"⁸⁶ was an idea that underpinned his writings and teaching at the turn of the century. Like Schenker, Riemann offered theories of how music "should" be heard⁸⁷ with Riemann devising a syllabus that took a "bottom-to-top aesthetic" approach starting with acoustics and the sound wave, using this as the basis for music theory, and then finally moving on to music style history.⁸⁸ Schenker, Riemann and all other music

⁸⁴ Ibid., 421-2.

⁸⁵ Rehding (2003, 19).

⁸⁶ Quoted from a letter to Liszt, 1879, Ibid., 20.

⁸⁷ Cook (2007, 7) and Rehding (2003, 9).

⁸⁸ Rehding (2003, 2). In this respect it is possible to see how surface-depth metaphors became ingrained in Germanic musical thought from Helmholtz onward, becoming a part of musicology's fundamental principles. Robert Fink's 'Going Flat: Post-Hierarchical Music Theory and the Musical Surface' (2001) discusses such

theorists working in this way wanted to demonstrate that “music as we know it is not purely artificial in construction but grounded in the natural phenomenon of the harmonic series”,⁸⁹ giving it supposed ‘scientific’ legitimacy, whilst at the same time ignoring items that failed to fit their model — the out-of-tune seventh partial, for example, which Schenker attributed to “the ‘wonderful, strange, and inexplicably mysterious fact’ that the ear is attuned only to the first five partials” and then moved on,⁹⁰ alongside the heated debate on the status of the minor triad.⁹¹

Influential in this regard was the Viennese Hermann von Helmholtz with his treatise *On the Sensations of Tone as a Physiological Basis for the Theory of Music*, 1863,⁹² whose judgement, because of his status as a *scientist* of high standing, appeared indisputable. His measurement of the interactions of upper partials between combinations of tones revealed consonance and dissonance to be relative terms, rather than as qualitatively different from each other.⁹³ Whilst Schoenberg does not mention Helmholtz by name, clear parallels can be seen in his *Harmonielehre* — the “false” assumption of consonance and dissonance as antithesis; with consonances as “simpler relations to the fundamental”, and dissonances as “more remote”.⁹⁴ And whilst Schenker would attack Schoenberg for setting up something in “opposition to [nature’s] law of consonance”,⁹⁵ Nicholas Cook suggests that Schoenberg was in fact taking full advantage of the overtone series’ potential, rather than abbreviating it; that extended tonality is in fact *more* natural than traditional harmony⁹⁶ — and eventually, from a modernist viewpoint, taking tonality toward its ‘logical’ conclusion.

Schoenberg’s efforts, via a Helmholtzian conception of dissonance, to use science (the primary legitimizer of the age) to defend his harmonic developments, are important since this trend parallels Schoenberg’s modernist drive toward the emancipation of timbre and his conception of *Klangfarbenmelodie*. In this regard Carl Dahlhaus, writing in the late 1980s, again sees Helmholtz as the driving force:

assumptions, suggesting that in one sense they stem from what he calls “Schenker’s fetishization of the ‘fundamental structure’” (105).

⁸⁹ Cook (2007, 168).

⁹⁰ Quoted from *Harmonielehre*, 1908 in Cook (2007, 168).

⁹¹ See Rehding’s discussion of harmonic dualism’s falsity (2003).

⁹² Helmholtz (1885).

⁹³ *Ibid.*, particularly pp. 193-197.

⁹⁴ Schoenberg (1978, 21).

⁹⁵ Quoted in Cook (2007, 169).

⁹⁶ See *Ibid.*, 168-9.

One can base an attempt at a more precise definition of what Schoenberg had in mind [regarding *Klangfarbenmelodie*] on Helmholtz's *Die Lehre von den Tonempfindungen* [, for] if one assumes that Schoenberg had at least a cursory acquaintance with [Helmholtz's book], it is clear that he could have deduced the idea of a 'logic' of *Klangfarbenmelodie* from what Helmholtz says about the 'logic' of the melody of pitches. According to Helmholtz, the 'feeling for the melodic relationship between consecutive notes' is based on the unconscious 'sensation of similar overtones in the sounds in question' [...] it was Helmholtz who was convinced that the capacity for hearing tone colours could be increased, thus enabling Schoenberg to derive support from him for his 'fantasies of the future'.⁹⁷

That *Klangfarbenmelodie*—in the Schoenbergian, 'logical' sense—failed to materialise as Schoenberg had predicted, should not imply that there was not a successful modernist drive to push timbral colour to its expressive limit, and instead Schoenberg's theories legitimized a period of timbral exploration and development in fin-de-siècle Viennese music. Dahlhaus sought to rescue Schoenberg's concept of *Klangfarbenmelodie* from its 'misinterpretations', and extrapolates from Schoenberg certain conclusions that have remarkable similarity with Hailey's description of Schreker's *Klang*:

Just as change in pitch need not necessarily present itself in a single tone colour in order to be a melody, so a change in instrumentation, in order to appear as a *Klangfarbenmelodie*, need not necessarily be confined to a single sustained pitch. Instrumentation becomes *Klangfarbenmelodie* not because pitch melody dwindles to monotony but because a balance is achieved between instrumentation and pitch melody in place of the usual predominance of the latter.⁹⁸

This redefinition of *Klangfarbenmelodie*, then, offers a way out of the 'crisis of response' to timbre — a crisis in the early twentieth-century Vienna, which Botstein suggested developed from "an enlarged audience of passive listeners, educated at the piano, consumed by a taste for a retrospective classicism"⁹⁹ and the rise in conservative criticism that sought to maintain traditional values and music's formal integrity.¹⁰⁰ Schoenberg's *Klangfarbenmelodie*, as reformulated by Dahlhaus, can be seen as an attempt to resolve the conflicting 'thesis' of keeping timbre as subordinate parameter, and its 'antithesis' (certain modern music which asserted timbre as primary parameter, at the expense of all else), with a modernist 'synthesis': the *balance* of both. However, I would suggest that Dahlhaus is

⁹⁷ Dahlhaus (1987, 142-3).

⁹⁸ Dahlhaus (1987 141-2). My emphasis on 'balance'.

⁹⁹ Botstein (1985, i).

¹⁰⁰ *Ibid.*, particularly chapter 4, (863ff.).

implying that this balance is not a static relationship, but rather a *fluid* one — one where timbre can influence our perception of the other parameters, but also vice versa. It could be argued, then, Dahlhaus's view of Schoenberg's *Klangfarbenmelodie* highlights once more that composers, such as Schoenberg, were aiming to reformulate the strict fin-de-siècle Viennese conception of the 'musical idea' to include timbral means.

Following these lines of thought, the music of Schreker, particularly moments such as the *Kammersymphonie* opening, can be seen to represent this synthesis—moments where pitch, harmony and instrumentation flirt with each other for supremacy—moments of Schrekerian '*Klang*'.

Timbre in fin-de-siècle Vienna was to be viewed as a problematic parameter in both early *and* high modernist aesthetics. The early modernists sometimes developed it to sensuous excess, and as such were criticised from a Nationalist perspective (in its perceived similarities to French 'Impressionism'),¹⁰¹ and the perspective of the German Idealist tradition (that separated the musical idea from its timbral surface) as being decadent. The critic Walter Niemann writes in 1913:

If one wanted to speak of the elementary materials of music in the old sense one would have to reject [Impressionism] out of hand as formless, shapeless, melodically weak, rhythmically atrophied, and—according to the standards of Germanic thoroughness—as childishly underdeveloped in polyphony¹⁰²

The tendency of writers like Niemann and Wellesz to equate surface with the superficial led music in which timbre *was* being used in a more constructive way (i.e. beyond simple elucidations of phrase, or using timbre as a replacement for any sense of development) to be made an enemy by association with that which did not. Perhaps part of the controversy surrounding such timbrally rich music was the perceived origins of timbre's emancipation in the equally controversial genre of the symphonic poem. Dahlhaus writes

[In the late nineteenth-century] sophistication of local color interacted with a relaxation of functional harmony to become one of the decisive evolutionary features of the age. Ultimately, around 1900, it led to a reformulation of the notion of timbre, one of the crucial features of fin-de-siècle musical modernism. This "emancipation of timbre," initiated by Berlioz, freed tone color from its subservient function of merely clarifying the melody, rhythm, harmony, and

¹⁰¹ Hailey writes: "To many Germans the Impressionism of the 'new French' school was an exotic flower whose color and fragrance were capable of overwhelming the senses, but not moving the soul. It was a movement little understood in Germany and it met with a good deal of critical resistance born partly of chauvinism, but more importantly, of aesthetic aversion...a deep-seated mistrust of the sensual, hedonistic roots of the style so at odds with Germany's own more austere and cerebral musical traditions.", Hailey (1993, 41).

¹⁰² Walter Niemann, *Die Musik seit Richard Wagner*, 1913, quoted in Hailey (1993, 42).

counterpoint of a piece, and give it an aesthetic *raison d'être* and significance of its own. In retrospect, this seems to have been one of the symphonic poem's 'anticipatory' traits...¹⁰³

Yes, timbre had been freed from its subservient functions, but whether it was truly *emancipated* in the same way as tonality would become is debateable:¹⁰⁴ in 1900 use of timbre still followed fairly strict rules as to what was acceptable, as is shown in the large number of orchestral treatises of the period. Whilst its role had expanded, timbre was—in 'good' orchestration—still expected to highlight the most important element for the listener's attention. Nevertheless, whilst never 'atimbral', its role was freer, and much in the same way that the reaction to the freedom of atonality provoked the serial response, so it seems logical to expect Schoenberg's desire for *Klangfarbenmelodie* — an imposed sense of order, allowing timbre to function more precisely with the other parameters. In the opening of Schreker's *Kammersymphonie*, timbre *does* have a function: the precise choice of timbre allows for an imprecision of tone — the semitonal dissonance of the opening harmony becoming more consonant. Neither timbre nor pitch function independently, each affects the other, and to therefore describe timbre as *superficial* is misguided.

Figure 1.2 shows a rudimentary example from Rimsky-Korsakov's *Principles of Orchestration*, where rather than produce an orchestral treatise that served as a mere appendix to those that had gone before, the design of Rimsky-Korsakov's *Principles* explicitly tries to lay out a new way of conceiving the role of timbre as something that interacts with music's primary parameters, rather than as a means of decorating those primary parameters. Figure 1.2 shows an example from the chapter on harmony, interesting because it explicitly considers the role of instrumentation on harmonic dissonance, whereas previously it had been considered (explicitly, at least) as solely the product of intervallic pitch spacing.

¹⁰³ Dahlhaus (1989, 243).

¹⁰⁴ There is at least a definite sense that development of timbre lags behind the developments of pitch-based parameters, which was partly what Schoenberg's *Klangfarbenmelodie* was trying to address.

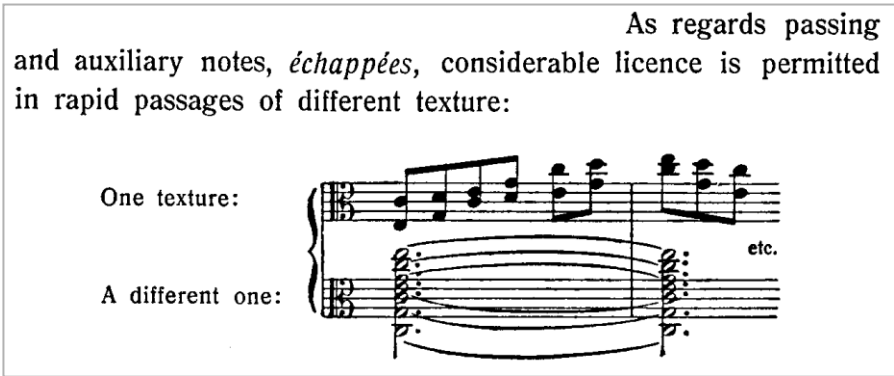


Figure I.2 — Excerpt from 'Harmony' chapter, Rimsky-Korsakov's *Principles of Orchestration*¹⁰⁵

Here Rimsky-Korsakov suggests that it is the difference in instrumental texture that allows these normally dissonant intervals to sound simultaneously, with reduced harshness. Rimsky-Korsakov, having read Helmholtz's influential *On the Sensations of Tone*,¹⁰⁶ here agrees with Helmholtz's summation that "the magnitude of the consonant intervals is independent of quality of tone, but the harmoniousness of the consonances, and the distinctness of their separation from dissonances, depend on the quality of tone [through the intensity, and the harmoniousness of their upper partials]."¹⁰⁷

The simple principles found in Rimsky-Korsakov's example can equally be applied to more complex examples, such as Schoenberg's *Erwartung* chord quoted in his *Harmonielehre*:

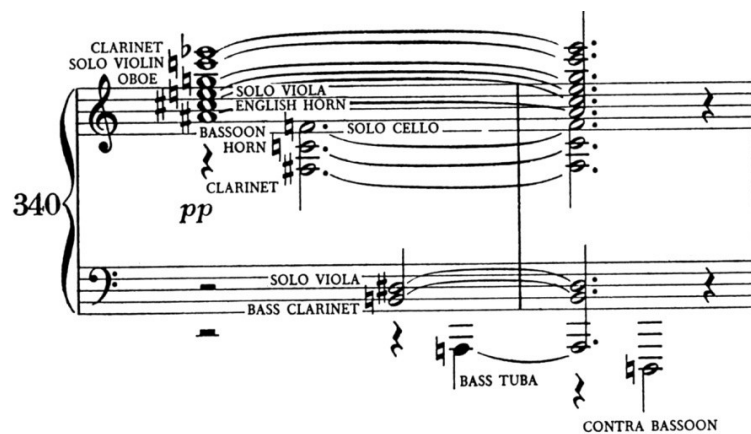


Figure I.3 — Bars 382-3 of Schoenberg's *Erwartung*, quoted in his *Harmonielehre*

Eleven different tones appear in this chord. But the gentle instrumentation and the fact that the dissonances are widely spaced make this sound quite delicate.¹⁰⁸

¹⁰⁵ Rimsky-Korsakov (1964, 66), published posthumously in 1912.

¹⁰⁶ "In the years 1873 and 1874 [after] reading the works of Tyndall and Helmholtz, I framed an introduction to my work.", Rimsky-Korsakov (1964, vii); Hermann von Helmholtz's *On the Sensations of Tone as a Physiological Basis for the Theory of Music*, first published 1862, see Helmholtz (1885).

¹⁰⁷ Helmholtz (1885, 5), see also the section 'dissonance for different qualities of tone', (204ff.).

¹⁰⁸ Schoenberg (1978, 418).

Containing eleven different tones, Schoenberg's comment that 'gentle instrumentation' reduces dissonance, shows affinity with both Rimsky-Korsakov and Helmholtz's remarks. However, Schoenberg's example is problematic — how are we supposed to interpret this chord? The density of the harmony is mirrored in the complexity of the instrumentation, with almost a different instrument assigned to each pitch class. However, the function of the instrumentation is unclear — if it is merely for the 'gentle' sound that Schoenberg describes, specific instrumentation is unimportant. In table 1.1 (cf. figure 1.3) I break the chord down into similar-sounding orchestral groups:

'Chord'	<u>Single Reed</u>	<u>String</u>	<u>Double Reed</u>	<u>Brass</u>
1	Clarinet (e ^b)	Solo Violin (c) Solo Viola (e)	Oboe (g) English Horn (c [#]) Bassoon (a [#])	
2	Clarinet (f [#])	Solo Cello (f)		Horn (c)
3	Bass Clarinet (b)	Solo Viola (d [#])		
4				Bass Tuba (a)
5			Contrabassoon (d)	

Table 1.1 — Instrumental breakdown of Schoenberg's *Erwartung* chord (cf. figure 1.3)

There appears to be no obvious structuring to the instrumental choices, other than that each chord consists of an inter-familial combination of instruments, encouraging the chords to blend after their asynchronous entries. Upon closer examination, however, we see there are some harmonic conclusions to be made. Firstly, the single reed (clarinet) group plays a root-position B major triad; heard alone, the double reed grouping could be perceived as a diminished triad over a D pedal — a triple suspension that could easily resolve to a D major triad; the strings form the only chromatic cluster; and the brass group is too small to substantiate a pattern. Returning to *Harmonielehre* for a moment, Schoenberg writes of the harmonic tendencies of each individual chord, saying that chord one, for example, might raise expectations to resolve in the following manner:



Figure 1.4 — Schoenberg's expected resolution of the first chord from Figure 1.3¹⁰⁹

Looking at this chord, and at table 1, we see that three of its notes — A[#], C[#], and G — belong to the double reed group, which, when heard alone (with the contrabassoon D pedal) tend toward a harmonic resolution on D major. Here we have a conflict: between Schoenberg's harmonic resolution, and the harmonic resolution inspired by the timbral makeup of the chord.

Referring back to figure 1.3, after the entry of all the pitches in the second beat of bar 383, how do these pitches interact? Removed from its immediate context in *Erwartung*, this chord can be heard as a dense chromatic cluster. With each instrument (theoretically) at the same dynamic marking, the ear has two anchor points with which to make sense of this musical moment: one, it can maintain the relationships posited by the synchronised chordal entries; and two, it could perceive inter-chordal relationships highlighted by timbral similarity. It is unlikely that these two modes of perception would function independently (after all, the first is sensorily immediate), but rather as two parameters in dialogue. Taken out of context, the function of this chord will remain ambivalent, but it is interesting that even this simple timbral breakdown has identified areas upon which a further analysis could be based: two tonal areas (that of B and D), already prominent in a simple harmonic analysis, are emphasised by the single-, and double-reed groupings, respectively; also, it might prove interesting that the only dissonant cluster is that formed by the string family. An analytical approach such as this shows the potential importance of timbre and instrumentation when making decisions about harmonic function.

In conclusion, at the end of this first section on the fin-de-siècle responses to timbre through contemporary treatises, it can be seen that there is a clear emphasis in the accepted textbooks of the time toward the conservative avoidance of excess and strain. However, in the examples from Strauss and Schoenberg we see the beginnings of a different viewpoint. Whilst both Strauss and Schoenberg

¹⁰⁹ Modified from Schoenberg (1978, 418).

discourage excess and misuse of instrumentation, both have extended the boundaries as to where ‘excess’ begins. Both writers exemplify the growing curiosity among fin-de-siècle composers eager to explore timbre and seek to codify this in an effort to legitimate their ideas against conservative disapproval. In addition, both Strauss and Schoenberg view their developments as part of a greater historical progression, as the ‘next logical step’, and both present their thoughts as indicative of increased ‘mastery’ of the subject (Schoenberg’s thoughts form part of a what is presented as an exhaustive guide to musical harmony, and, as we have discussed, Strauss places strong emphasis on complete knowledge of the techniques and timbral extremities of each instrument). The discussion so far has highlighted that, at the extremes of discussion, timbral usage in fin-de-siècle Vienna created bipartisan responses as to whether the wider concept of the musical idea should or should not include timbre. Treatises tended to set orchestration below the other parameters and promote a conservative response, but not without some problematization of the idea as shown in the Strauss and Schoenberg examples. These themes are continued as we move into the second section on the contemporary use and consumption of piano reductions and transcriptions. Returning to Schoenberg’s *Erwartung* chord above: if one was to remove the orchestral component of this chord, the richness of its harmonic interactions would be lost. Yet, “Unless one lived near a major metropolitan centre”, writes Thomas Christensen, “and, just as importantly, had the necessary financial resources, opportunities for hearing a live concert or opera performance were limited in the nineteenth century.”¹¹⁰ This is a problem for music like this where orchestral construction had become prominent. As Botstein described above, instead of hearing a live orchestral performance, for many their first or only experience of orchestral music was from their ‘education at the piano’, through duets and transcriptions. Schoenberg used and encouraged such arrangements at his ‘Society for Private Musical Performances’, partly out of financial necessity, but also for its analytical value — whilst his remarks in *Harmonielehre* clearly stated that pitch and timbre should be viewed as inseparable, his remarks on the usefulness of the piano reduction, discussed below, seem to contradict this, returning once again to the concept of idea and orchestration as distinct, and in hierarchical relation to one another. The fin-de-siècle Viennese quest for organicism between musical idea and orchestral form, of balance against decadent timbral combinations, favoured music

¹¹⁰ Christensen (1999, 259).

where the orchestration was more easily separable precisely because it insisted on making a clear distinction between the two categories. Ironically, the music of the composers who took a more ‘organic’ approach to the orchestration of their music, not viewing it as a separate process, were those that were charged with lack of invention, or decadence. This effect, I suggest, is partly due to the role of the piano transcription in musical life: those composers whose timbral combinations were integral to their musical conception lost out when their works were played at the piano. This pattern still influences musical analysis today: Richard Taruskin remarks, when reviewing Downes’s survey of musical decadence, that

one turns from the mind-boggling to the ear-tickling as one tests the music examples at the keyboard. This is one book one really needs to read near a piano. Without what Stravinsky called “contact with the *matière sonore*,” one misses everything.¹¹¹

Throughout Downes’s book all the orchestral excerpts appear in piano reduction, and as a result Taruskin’s position is similar to that of the fin-de-siècle Viennese critic or audience member who becomes familiar with a work from the piano version. In fact, the ‘*matière sonore*’ has been replaced with a piano reduction, so what are Taruskin and, by extension, the fin-de-siècle listener missing out on?

1.1.2 — The Piano Transcription: a select legitimator

Discussion of the piano transcription, a genre popular in the late nineteenth- and early-twentieth centuries, provides interesting contemporary viewpoints with respect to the idea of musical colour as surface property raised in the previous section. As we shall see, responses to fin-de-siècle composers’ orchestral work was frequently informed by critics’ initial familiarity with the keyboard version. That the timbral colouration of the music *could* be removed in such a way reinforced the idea for many that timbre was secondary (without necessarily forcing them to ask the question as to whether it could be removed *successfully*).

Karen Painter’s account of the early dissemination of Mahler’s works is indicative of this approach:

[One] reason timbre was thought to be of secondary status stemmed from the way that symphonic music was learn[t] through piano arrangements and thematic guides. Mahler’s

¹¹¹ Taruskin (2011, 750).

publishers all hired arrangers to transcribe his symphonies for four hands and piano solo—arrangements used by concert-goers and critics. Because orchestral color was washed out in piano arrangements, it remained irrelevant for those actively learning symphonic music on the piano, rather than passively enjoying a performance in the concert hall.¹¹²

Whilst the orchestral colour was not physically present in the piano transcriptions, however, to remark that it was therefore ‘irrelevant’ for those learning symphonic music on the piano is misguided. True, the piano arrangement encouraged the division of underlying thematic content and surface colour mentioned above, and, as Thomas Christensen writes, it was “inevitable” that as composers “increasingly exploited orchestral timbre and texture” that piano reductions would sound somewhat “pallid in comparison”.¹¹³ However, this would encourage the analogy between “the piano arrangement and a black-and-white sketch of an oil painting” to be “repeated again and again throughout the nineteenth century” and beyond.¹¹⁴ Form and shading were still apparent, but the nuances of colour—far from being ‘irrelevant’—were left to the imagination, or memory of the perceiver; just as when viewing a modern-day photograph in black and white.

Painter fails to acknowledge the *active* element of transcription performance. A critic from the *Allgemeine Musikalische Zeitung*, 1842, writes

We should bear in mind the function of an arrangement, that it is to remember the impression that the work originally made on us, by means of recalling the musical material, and in this way to enjoy the work once again. Given this function, we find [...] a certain necessity and, so to speak, apology for an arrangement.¹¹⁵

In 1933, Adorno would write of the piano duet that it contained “the timid gesture of memory”¹¹⁶ — which for Christensen signifies “the bodily (re)activation of the music with four hands as the recollection of it through performance.”¹¹⁷ Alexander Rehding’s recent discussion of the piano duet as *aide-mémoire* but also as “souvenir” enforces this view:¹¹⁸

Like the modern souvenir, then, which can substitute for the first-hand experience of a tourist destination, the piano arrangement can stand in for the experience of listening to a new [or old] work [...] it is irrelevant here whether the memory triggered by the piano arrangement is

¹¹² Painter (1996, 87-8).

¹¹³ Christensen (1999, 274).

¹¹⁴ Ibid.

¹¹⁵ Quoted in Rehding (2009, 94).

¹¹⁶ “eine schüchternen Geste der Erinnerung”, from Adorno’s *Vierhändig, noch einmal*. Quoted in Christensen (1999, 283). Complete translation found in Adorno (2005a).

¹¹⁷ Christensen (1999, 283).

¹¹⁸ See chapter 3: “Sounding Souvenirs”, in Rehding (2009, 73-108).

of a past performance [...] whether it replaces an actual performance that could not be attended by many [...] or indeed whether it serves to prepare for an actual performance in the future.¹¹⁹

When viewed as ‘souvenir’, the piano duet can be seen to trigger memory of certain orchestral colours not present, as well as raising *expectation* of what that colour might be like if not yet experienced.

Christensen provides evidence for the experiencing of the piano arrangement as orchestrally coloured prior to experiencing the orchestral version itself, in a review from Schumann:

If we add to this as correct and euphonious an instrumentation as might be *expected* from [the composer], and remember that the symphony is written in the good orchestral key of E^b major, we shall have a tolerably good idea of it.¹²⁰

That we can have a ‘good idea’ of the finished piece from mentally inferring ‘correct’ and ‘euphonious’ instrumentation, is a pertinent remark. Colour then clearly is not, as Painter had suggested, ‘irrelevant’ — the act of playing a piano arrangement is not merely a passive one, but one that actively involves musical knowledge and memory to (p)reconstruct the full orchestral colour of a live performance.

It is hardly surprising, then, that conservative critics of the fin-de-siècle voiced their concern at the more elaborately orchestrated works of the time. If ‘expecting’ the ‘correct’ and ‘euphonious’ orchestration espoused by the past masters (and advocated in the contemporary treatises), the conservative critic’s preconceptions might differ considerably from the actual sonorous presentation of the orchestral colour, and—if differing too strongly—appear to subvert the normative approach to orchestration. The piano transcription appeared to be a genre that was being left behind in terms of its usefulness for disseminating fin-de-siècle orchestral work.

Schoenberg, writing in *The Modern Piano Reduction* (1923),¹²¹ puts forward a slightly altered view of the piano reduction — it is a “useful object [...] for known reasons, for a particular purpose”.¹²²

A sculpture can never be seen from all sides at once [...] the piano reduction should only be like the view of a sculpture from *one* viewpoint[.] Most authors of modern piano reductions limit

¹¹⁹ Ibid., 106.

¹²⁰ Schumann, *Music and Musicians: Essays and Criticisms*. Quoted in Christensen (1999, 267).

¹²¹ Schoenberg (1975, 348-50).

¹²² Ibid., 348.

themselves to transposing for piano the various parts the score contains[.] These people resemble a cook who instead of serving up dishes, serves up the ingredients from which they should be prepared.¹²³

Piano transcriptions of modern orchestral works often featured as part of the concert programme at Schoenberg's *Verein für musikalische Privataufführungen*.¹²⁴ One reason for this was financial, but as one biographer relates, Schoenberg

believed the presentation of large works in arrangements for reduced forces allowed for a clarity of presentation and simplicity of formal enunciation often not possible in a rendition obscured by the richness of orchestration[.] Schoenberg's opinion [writes the pianist Stefan Askenase] was, that a work could be better judged without any orchestral decoration, that one could find out what it really contained of musical quality.¹²⁵

Here Schoenberg does not deny the role orchestral colour might play, but instead sees the piano reduction as Painter suggests it was intended — as a tool for learning, for *Bildung*¹²⁶ (an idea that agrees with the *Verein's* overall aesthetic). People were wary of the sensual immediacy of certain timbral configurations, as Walter Niemann explains:

Music is changed from being the conveyor of poetic[,] psychological and philosophical feelings and matter, into a physiological art of nerves, mood, and timbre, externally defined.¹²⁷

Niemann's concern is that music has moved from being an intellectual pleasure to a *bodily* one — a decadent thrill, which, due to the abundance of tone colour (music's physical element) it was difficult for the listener not to be overwhelmed by music's physical presence, distracted from its 'underlying' intellectual workings. Hanslick wrote of similar concerns, that

The most powerful effects of music are mainly to be attributed to the *bodily* excitement of the listener [...] this powerful penetration of the nervous system turns not so much on its *artistic* aspects[—]created by, and appealing to the mind—as on its material, *sonority* [...] to which nature has imparted the innate and unfathomable physiological affinity.¹²⁸

This misuse of nature is problematic: according to Hanslick's view, the 'innateness' of the 'physiological affinity' with sonority leaves the listener with no choice but to be overwhelmed by the sonorous aspect, at the expense of that which 'appeals to the mind'. As Painter notes, this view gave

¹²³ Ibid., 349.

¹²⁴ Parks (1999, 50-1).

¹²⁵ Joan Allen Smith, *Schoenberg and his Circle*. Quoted in Parks (1999, 52).

¹²⁶ See Painter (1996, 89).

¹²⁷ Niemann, quoted and adapted from Ibid., 129.

¹²⁸ From Hanslick's *Vom Musikalisch-Schönen*. Quoted, and adapted, from Ibid., 126.

critics the option to justify their experiences of timbre through expressions such as being “captivated by” or “forced to admire” skilful orchestration: “portrayed as unwilling captives, listeners could enjoy timbre with less guilt over the pleasure”.¹²⁹ Hanslick’s appointment as one of the first professors of the history and aesthetics of music, at the University of Vienna, meant that such conservative viewpoints regarding timbre would have been considerably influential in musicology’s early formation as a discipline.

Clearly such sensual elements run counter to the idea of *Bildung*, and Schoenberg’s aesthetic standpoint is to suggest that by listening to the reduced-colour piano transcription the other parameters are easier to examine. Clearly Schoenberg does not see orchestral colour as ‘irrelevant’ (a “reduction is not the whole, only a part”),¹³⁰ but rather speaks of his desire to assess the motivic working independently of its orchestral form, so that a more informed response to the relationship of motive and colour in the orchestrally complete piece can be made. Schoenberg’s position can be expanded in his short essay on instrumentation eight years later.¹³¹ Here he remarks (somewhat problematically) that “the piano can make no distinction of tone-colour whatever”, and yet one “doubts whether there is [in fact a] greater wealth of sound-figures in the orchestr[al repertoire]”.¹³² However, Schoenberg continues:

But then one must reflect on the following point:

If coloration had no deeper significance than that of crude, naïve pleasure in sheer colour, it would be something on a very low level [and] it could scarcely have a claim to consideration. But if one’s approach is that colour serves to underline the clarity of the parts [...] then one must reflect for a while [...] Let us remind ourselves at this point that there are not only elements meant to stand out from each other, but others that are meant to mingle[...]¹³³

For Schoenberg, instrumental colour played an important role, altering the perception of the pitches it coloured. Schoenberg was not suggesting that the removal of tone colour is an ideal (or in the end entirely possible), but rather that it is possible to learn from such separation to appreciate the whole. The advantage of the piano arrangement, like the “black-and-white drawing”, allows one “to distinguish the parts with complete certainty, so long as they differ from each other in essentials—in

¹²⁹ Painter (1995, 118). See ‘Tropes of captivating and mastering’ (118-23).

¹³⁰ Schoenberg (1975, 349).

¹³¹ *Ibid.*, 330-6.

¹³² *Ibid.*, 333.

¹³³ *Ibid.*, 333-4.

movement, in rhythm, in the space allotted to them.”¹³⁴ A similar viewpoint can be found earlier in the century, constructed in a more negative fashion, in the quotation from the German music aesthetician, Karl Grunsky, in 1907:

One runs the risk of making tone color, as a quality of tone, the essence of any connection of tones. No one should forget that before the instrumentation there must be an idea[.] The musical ideas, the ordering and dynamics of tension and release, are the main elements! And it must be possible to call forth the inner movement of music by means other than those for which it was originally conceived. Without this possibility, all musical life would collapse in wasteful dissipation and become impoverished[.] As the best evidence we point to the relationship between orchestral works and piano arrangements. With the piano, whose sound leaves so much to the imagination, whose tones faithfully reproduce the outline of the design, the musical world possesses a binding agent, a medium that holds together the differing genres, one whose musical worth is validated by the strengthening and deepening of musical experience through preparation and remembrance. Whoever speaks out against piano arrangements wants superficiality and has reason to want it.¹³⁵

The familiar themes are present here: the requirement of the active ‘imagination’; of ‘preparation’ for, and ‘remembrance’ of the musical experience; the desire to use the piano arrangement to separate ‘instrumentation’ and ‘musical idea’ to see whether colour has assumed undue prominence. Once again we see at the fin-de-siècle an uneasy view of tone colour. The piano transcription helped the idea that timbre was not essential to the musical idea *itself*, but rather a parameter that interacted appropriately or inappropriately in relation to the quality of the underlying musical material; the piano transcription functioned as legitimation of the idea that timbre was a parameter that could be added or removed and that if the piece ‘survived’ this process then it was appropriately orchestrated. In addition, then, the ‘aesthetic ideal’ of the Classical style and its orchestration was an ideal the piano transcription favourably served to perpetuate.¹³⁶

Unsurprisingly, Schreker’s music often ‘failed’ the piano transcription test. Universal Edition prepared a vocal score for his opera *Der ferne Klang*, yet, for Berrsche, this arrangement “was just as misguided as photographing [in black and white] the painting of an artist who intentionally neglects

¹³⁴ Ibid., 334.

¹³⁵ Karl Grunsky’s *Musikästhetik*. Quoted in Christensen (1999, 291).

¹³⁶ Christensen, for example, writes “The orchestral music of Haydn and Mozart, it was generally agreed, translated well on the keyboard”, with one contemporary reviewer remarking: “You can play a Haydn symphony on a pianoforte [...] and it will not lose very much of its zest. [Try] the same thing with Liszt, Wagner [or] Brahms, and you will nigh pierce the composition to the very heart”, March 1879. Quoted in Christensen (1999, 272, 273).

line and is sensitive *only* to color.”¹³⁷ Perhaps responding to such criticism, Universal Edition published no piano arrangement for the *Kammersymphonie* (1916).¹³⁸ It was only in 1925 that one of Schreker’s pupils, Ignaz Strasfogel, independently arranged the piece for piano — Schreker was delighted with the “splendid arrangement” and made plans for its publication.¹³⁹ The first three bars are included below for comparison with figure 1.1:



Figure 1.5 — Schreker (arr. Strasfogel), *Kammersymphonie*, piano version, bb.1-3, UE 8755

Here, and often throughout this ‘concert-arrangement’, Schreker’s style fails to translate effectively to the medium of piano: it shares many similarities with Ravel’s solo piano style (much of *Sonatine*’s opening movement, for example), but is somewhat registrally cramped with indifferently overlapping lines, and has a less spacious and luminous effect as a result.¹⁴⁰ Echoing Schoenberg, the piano presents each instrumental line somewhat equally: rather than being ‘distinguished with complete certainty’, the instrumental lines often inhabit the same pitch ‘space’. Once the timbral distinction is removed the effect is of flatness of surface (the individual lines do not interweave, but rather overlap, and intrude on each other’s perceptual space); they feel as if they are merely superimposed. Comparisons can now be made between this piano transcription and my discussion, at the start of the chapter, of the *Kammersymphonie*’s opening in figure 1.1. At the start of the chapter

¹³⁷ Alexander Berrische in *Die Musik*. Quoted in Hailey (1993, 53).

¹³⁸ Although, perhaps, financial considerations also played a part.

¹³⁹ Liner notes Schreker & Strasfogel (2001, 11).

¹⁴⁰ That Schreker’s music has strong affinities with certain characteristics of the ‘New French’ School has already been noted and discussed (in addition, see Hailey (1993, 45)). However, with regard to Ravel’s piano style, it is interesting that no-one has yet noted the remarkable similarity between the opening of *Gaspard de la Nuit*, and the overture to *Die Gezeichneten* (and to a lesser extent the *Kammersymphonie* opening). One imagines that if Ravel had orchestrated the opening of *Gaspard* it would be strikingly similar to the sound-world of Schreker’s overture.

I wrote that in the opening two bars each of the instrumental timbres was “both distinctive enough to establish, at times, separate points of origin for each sound, but also similar enough to blend as a semi-homogenous group”. Clearly this is not the case for the piano transcription, and, in addition, where the original version has at least 5 different timbral elements or strands to the sound, the piano transcription only maintains two separate strands (the melodic line from the flute, and an adaptation of the piano arpeggiations) through pitch and rhythmic difference. On a simplistic level, therefore, the sound is less complex through the smaller number of individual strands maintained. More pertinently, however, the piano transcription does not allow for the subtle harmonic fluctuations in semitonal dissonance that the original provided. The different timbral presentation of Strasfogel’s piano transcription alters the harmony of the opening in two noticeable ways. Firstly, it is less dissonant: though the sustain pedal maintains the chord, there are no semitonal dissonances presented simultaneously in the first three bars. Compare this with our discussion of the orchestral original, and we see this is a stark contrast to the sustained D in the harmonium with the various C[#]/D^bs in the other instruments. Secondly, the piano transcription is less complex: as shown in figure 1.5, the harmony does not change on the third beat of the bar, as the original does, but rather waits until the fifth quaver. This change in harmonic rhythm disrupts the ‘two-in-a-bar’ feel in the original, presumably to sustain the C[#] tonic pedal from the celesta part. If we compare the left-hand piano part with the original piano and celesta parts we can see that Strasfogel altered the shape quite dramatically, not only to sustain the C[#] pedal but also so that the piano’s left-hand does not ‘interfere’ with the flute melody in the right hand. Unlike the original, where the piano and flute parts inhabit the same pitch space, Strasfogel’s piano part separates these elements; whereas the original piece allowed the two parts to overlap (but remain distinct through timbral difference), the same could not occur in the piano transcription as the lines would become muddled. The lack of timbral distinction becomes more prominent when, in the third bar, the violins enter. The sustained line is easily discernible in the original (and noticeably *different*), but in the piano transcription the entry blends with the two layers that have already been presented. As a result the sense of narrative dialogue that results from the timbral change (outlined in my earlier discussion) does not take place, nor is there as great a sense of dissonance as there is no sustained harmonium G[#] to clash with the ‘violin’ entry.

At moments of simple melody and accompaniment the transcription is often successful, but at moments like the opening when there is a more complex sense of dialogue between simultaneous parts, it fails to translate effectively.

From a fin-de-siècle conservative viewpoint, given the difficulty of transcribing the *Kammersymphonie* successfully, this piano arrangement might be seen to expose the work's 'lack of musical ideas'. However, this criticism can hardly be levelled at the *Kammersymphonie*, which is densely motivic throughout. The problem here lies in the fact that in certain points of Schreker's work, colour becomes part of the musical idea and traditional counterpoint of themes is often replaced by an 'emancipated' counterpoint — neither of which can a piano reduction relate effectively. In the orchestral opening, traditional counterpoint, built on the strict treatment of dissonance and intervallic spacing, has been freed from such strictness by a new type of spacing: the perceptual distance between each instrumental voice due to their different timbres — as with the earlier *Erwartung* example, timbre serves to modify the perception of harmonic dissonance.

The discussions around the sensuousness of colour at the fin-de-siècle, and the related discussions of the piano duet, reveal precisely the fact that colour—whilst sometimes described as 'superficial'—was seen not as 'irrelevant' or 'trivial' by either those who held a conservative view, or those with more modernist leanings. Rather, both groups saw colour's immediacy as precisely its inherent 'danger', or its 'power', respectively. For conservatives, tone colour was the parameter that appealed directly to the bodily senses, rather than the intellect; but for the modernists, colour's ability to interact with music's 'primary' parameters was a constructive point of development worth exploring to its limits. Conservative voices sought to separate surface and idea, not necessarily to trivialise musical tone colour, but to assess the validity of these interactions.

The problem with the piano reduction is that it translated least successfully those works that used timbre and orchestration to provide careful gradations of dissonance, or whose themes and ideas were organically bound up with their timbral profile. Due to its prominent role in Vienna's musical consumption and reception and its association with a sense of moral *Bildung*, it is sensible to assume that the piano transcription may have played a part in perpetuating the *status quo* and keeping the more adventurously scored works on the sidelines precisely because much more was 'missing' from these works when played at the piano.

1.2 — CASE STUDY: Schreker's *Kammersymphonie* and its Reception

Comparison of the *Kammersymphonie's* opening with its piano transcription showed that Schreker's musical ideas failed to translate particularly effectively to a single instrument, with the main losses being a reduced sense of spatiality or depth (through the reduction in the number of different instrumental 'strata' interacting: a reduction to a single timbral origin point) and less control over the dissonant harmonies through timbral difference. On the one hand, the piano transcription of the *Kammersymphonie* exemplifies the extent to which timbre had become a primary (rather than merely secondary) parameter of importance for composers such as Schreker, and, on the other, it provides a starting point for analysing the contemporary critical reception of Schreker's work. One might predict that, as a result, contemporary conservative critics may have reacted unfavourably to the prominence of Schreker's 'ornamental' orchestration. However, primary source material for Schreker's *Kammersymphonie* is hardly discussed in the secondary literature, which is surprising given the status of the piece amongst Schreker's oeuvre. Christopher Hailey's otherwise outstanding book, for example, fails to discuss its reception—or indeed the work itself—only mentioning, in just a few sentences, the occasion that prompted the work's creation.¹⁴¹ Eckhardt van den Hoogen's thesis on Franz Schreker's orchestral works, which devotes 57 pages to the *Kammersymphonie*,¹⁴² omits any mention of contemporary reaction to the work. What follows, then, is a brief exposition and analysis of contemporary reviews from eight newspapers dating from between 12 March 1917 and 15 November 1918 (collated in the 1920 special Schreker issue of *Musikblätter des Anbruch*),¹⁴³ and in addition a review by Paul Bekker from the *Frankfurter Zeitung*, dated 17 January 1920 (a performance that also included Schoenberg's Chamber Symphony), from which contemporary reaction to the *Kammersymphonie* might be assessed. Analysis of the contemporary reaction to Schreker's piece is important as it not only fills a gap in Schreker reception scholarship, but also allows this thesis to establish exactly what fin-de-siècle critics found objectionable, or laudable, in contemporary orchestral writing so that such responses might inform later analysis.

¹⁴¹ The work was written for the 100th anniversary of the foundation of the Vienna Academy, where Schreker taught, and was premiered on 12 March 1917.

¹⁴² "Die Orchesterwerke Franz Schrekers in ihrer Zeit": *Werkanalytische Studien*, van den Hoogen (1981, 236-292).

¹⁴³ *Musikblätter des Anbruch* (Schreker Sonder-nummer), January 1920, 2/1-2, (60-2).

Schreker's varied, sometimes novel, use of the orchestra engendered strong responses from both sides, and it is in this regard that the *Kammersymphonie* makes an ideal initial case study.

One might expect the special *Anbruch* issue to contain only laudatory reviews of Schreker's work, but, whilst the *Kammersymphonie* reviews are generally positive, a number do put forward negative appraisals. The most extreme example comes from an unnamed critic at the *Schlesische Zeitung* (22 March 1918), remarking that "after the celibate, tranquil and noble sounds of Mozart's music, the first sounds [of the *Kammersymphonie*]—which certainly belong to the most painful—were almost an ear torture".¹⁴⁴ The idea that the sound of Mozart's music could be considered 'celibate' in comparison to that of Schreker, recalls the comments highlighted by Karen Painter with regard to the physical, sensual nature of Mahler's music that critics considered to be excessively orchestrated. By invoking the mind-body dichotomy, and suggesting that Schreker's music appeals more to the physiological side than the intellectual, the critic at the *Schlesische Zeitung* is suspicious of its worth. The writer does add, apparently as some sort of concession, that "had one but first got used to this [mode of] expression [...] it was felt that one might be shifted to another realm of musical listening, [one] which probably obeyed its own laws".¹⁴⁵ Whilst not entirely convinced, the critic seems to suspect that Schreker's work does have a coherent logic that follows its own immanent principles, thus satisfying the intellectual demand for organic development 'from the material'. However, this concession is qualified by their remark that it is through power of the orchestral presentation—the 'painful', non-celibate mode of expression—that the listener might be forcibly 'shifted' to this alternate 'realm of musical listening'. The problem for this critic is that the sensual presentation of the music dominates the auditory experience.

We can gather from this review, and Paul Plüddemann's review of the same occasion, that Schreker's *Kammersymphonie* received a repeat hearing in the same concert.¹⁴⁶ For Plüddemann

the work proved significantly easier to grasp on the second hearing, to which [...] an even more sophisticated performance can [partly] be thanked; the "disconcerting residue" [*Befremdensrest*] of which I spoke at the time, [had been] completely removed [...]¹⁴⁷

¹⁴⁴ "Nach dem keuschen und abgekert hehren Klängen der Mozartschen Musik waren die ersten Klänge, die ja allerdings zu den schmerzlichsten gehören, beinahe eine Ohrenfolter". Universal Edition (1920, 62).

¹⁴⁵ "Hatte man sich aber an diesen Ausdruck einmal gewöhnt...so empfand man, daß man in ein anderes Reich des musikalischen Hörens versetzt sei, das wohl seinen eigenen Gesetzen gehorche.", Ibid.

¹⁴⁶ "...Zwischen den Gesangsvorträgen wurde Schrekers "Kammersymonie" wiederholt". *Breslauer Zeitung*, 22.März.1918, Ibid.

Plüddemann does not specify in this review exactly what ‘*Befremdensrest*’ refers to, but it is clear that the repeated hearing has engendered within him a more positive disposition toward the work. Despite this, the entirety of Plüddemann’s response is one of ambivalence:

Our spiritual condition will not always tend toward such dusky dream-depths, [it will] not always want to lose itself in such labyrinthine paths of yearning, but at the right time the composer knows to lead us away into the land of his fantasy, from which the formal principles, that he forced upon himself, only all-too gladly spring, in order to unnerve us more safely with the kaleidoscope of hashish-intoxication—which, [coming] out of the magic of his instrumental inspirations, is to be indulged in [*genießen*].¹⁴⁸

A somewhat ‘labyrinthine’ sentence itself, in which Plüddemann also invokes the mind-body dichotomy, this time in Schreker’s defence: suggesting that the formal principles of the music serve as a counterbalance to the danger of Schreker’s ‘intoxicating’, instrumental combinations — enough so that Plüddemann can indulge in them more ‘safely’, or securely. His ‘kaleidoscope of hashish-intoxication’ metaphor, which at first might be dismissed as hyperbole, does highlight two important qualities of the opening Schrekerian *Klang*: firstly, the reference to drugged intoxication suggests a certain *disorientation* felt on the part of the listener through the timbrally de-stabilised harmonies at moments like the opening, and the variety of timbral profiles throughout. Secondly, the comparison with the kaleidoscope is apt because the viewed image is both one of continuous and somewhat unpredictable movement, and simultaneously *static* due to the circular and repetitive nature of the rotating image. If we compare this with the earlier timbral analysis of Schreker’s *Kammersymphonie* opening (figure 1.1), there are clear parallels to be drawn with the Schrekerian *Klang*: the predictability of the individual instruments’ circling ostinati is tempered by the fact that each instrument is not *heard* continually and in isolation, but rather through a state of flux, which creates the ‘kaleidoscopic’ timbral effect.

Plüddemann’s other remarks regarding the ‘forced’ nature of Schreker’s formal principles, seem to suggest that they fail to function entirely effectively in this piece. Plüddemann’s opening

¹⁴⁷ “Das Werk erweis sich beim zweiten Hören als bedeutend eingängiger, was nicht an letzter Stelle der gegen das erste Mal noch gehobenen Darstellung zu danken ist; jener “Befremdungsrest”, von dem ich damals sprach, war von den konzertierenden Künstlern restlos abgefallen...”, *Ibid*.

¹⁴⁸ “Unsere Seelenverfassung wird nicht immer sich neigen in so dämmerige Traumestiefen, sich nicht immer verlieren wollen in so labyrinthische Sehnsuchtspfade aber zur richtigen Stunde weiß uns der Tondichter mit sich fortzuführen in das Land seiner Phantasik, die dem Formenprinzip, das er sich aufgezwungen hat, nur allzu gern entufert, um uns desto sicherer mit dem Kaleidoskop des Haschischrausches zu entnerven, der aus dem Zauber seiner instrumentalen Eingebungen zu genießen ist.”, *Ibid*.

statement, that the piece was ‘significantly easier to grasp on the second hearing’, suggests a lack of strong auditory waypoints to guide the listener, and that only on the second attempt could such signposts start to be deduced. The security of feeling that there was some sort of structural foundation—however much inferred—provides the means for Plüddemann to assess the work more positively, and for ‘safe’ enjoyment of the moments of rich instrumentation. The first critic, whilst less positively disposed, elaborates on this point further:

Next to many beautiful and therefore clear items stood confused [ones], whose relations [one found] difficult to comprehend. One main hindrance to the aesthetic enjoyment lay in the unclarity [Unübersichtlichkeit] of its form. As a result, the work appeared too long for the time being. Only the climaxes stepped into a stronger light.¹⁴⁹

The critic equates clarity to beauty, and is seemingly dismissive of the moments of complexity and confusion. However, in the *Kammersymphonie* the moments of ‘confusion’ (with its dense textural layering, and timbrally blurred harmonies) significantly outnumber moments of ‘clear beauty’. No wonder, then, that the critic finds the piece wanting. It is a mistake to dismiss such moments of complexity as formally unimportant, for, if we take the opening moments of the piece as an example, it is often such moments that are structurally essential. The opening bars, though certainly complex, are *memorable* and, despite being difficult to aurally dissect, contain much thematic material and provide later moments of recognition at important structural junctures throughout. At this point in the thesis, I should clarify that it is not my intention to comment on timbre’s interaction with any one particular musical parameter in isolation. John Sheinbaum’s thesis, for example, focuses on Mahler’s use of timbre in relation to structure in great detail. Instead, I choose to examine timbral moments where the music appears to break away from conservative norms and ideals established in this first chapter and analyse them on a case-by-case basis. Reference is often made to the various other musical parameters, but they are chosen according to their relevance to each case study.

The perceived need to repeat Schreker’s *Kammersymphonie* in order for it to be fully understood sets his piece in line with certain modernist works of this time, pre-empting the aesthetic stance of Schoenberg’s Society for Private Performances—established in Vienna later that year—which often

¹⁴⁹ “Neben vielen schönen und daher klaren Einzelheiten steht Verworrenes, das man in seinem Zusammenhang schwer erfaßt. Ein Haupthindernis für den ästhetischen Genuß besteht in der Unübersichtlichkeit der Form. Das Werk erscheint dadurch fürs erste als zu lang. Nur die Höhepunkte traten in stärkeres Licht.”, Ibid.

encouraged repeat performances of new works so that audiences could familiarise themselves with a work more fully. By having the work played twice a value judgement is being made: this work is difficult, but *worth understanding*. Schreker's work was difficult to play: for example, a letter to Schreker after a performance of the *Kammersymphonie* by the *Bernischer Orchesterverein*, dated 5th July 1921, spoke in praise of the “magnificent” work and spoke of its “very great success” with the public — but it also speaks of the “10 rehearsals” over which “much love was gained for the difficult work”.¹⁵⁰ Contrast this with a concert two years later, reviewed by Paul Bekker: the concert, held in Berlin on 12th January 1920, contained both Schoenberg and Schreker's chamber symphonies. Bekker notes that “both pieces are certainly not innovative in the absolute sense”,¹⁵¹ but that they give, “even today, a revealing insight into the Will and Becoming of contemporary instrumental music”.¹⁵² In this concert, however, it was not Schreker's *Kammersymphonie* that was given a second hearing, but Schoenberg's. Normally an avid Schreker supporter, Bekker's reception of the piece—in contrast to Schoenberg's—is ambivalent. It is “no wonder”, writes Bekker, “that [Schreker's *Kammersymphonie*] with its ingratiating melodic charm, casual ease of formal development, and delightful fantasy of his sound-effects [have] made a strong impression and brought the present composer such lively recognition”.¹⁵³ This seems a rather positive assessment until one compares it to the description of Schoenberg's piece:

Schoenberg's work is completely different in nature [...] Missing is the sensuous warm *Klang*-complexion; colour as its own means of expression disappears. Contour, line is everything [...] Form is well-calculated from inner laws [...] The thematic and motivic development shows rigorous logic — hardly a part, hardly a bar, is not founded and grown intellectually out of the preceding bars [...] Here we speak no more of ‘external function’—the virtuosic element is completely turned off—with players and listeners treated with almost reckless hardness[. It is] pure spiritual-expression music [...] We know too little of Schoenberg's overall appearance [to determine the reason for] the lack of warm sound-sensuous [*klangsinlichen*] feelings [...] but the self-contained, strong, and despite all resistance—through his intellectual force—the

¹⁵⁰ “Gestatte mir, Ihnen sehr verehrter Herr professor beiliegend einige Pressestimmen über die hiesige Erstaufführung Ihrer herrlichen “Kammersymphonie” zu senden und freue mich Ihnen mitteilen zu können, dass Erfolg ein sehr grosser war. [...] Unser Orchester hat in 10 Proben das schwierige Werk sehr lieb gewonnen.”, ÖNB call number: [F3.Schreker.626].

¹⁵¹ “Beide Stücke sind freilich keine Neuheiten um absoluten Sinne mehr...”, Bekker (1920).

¹⁵² “Immerhin geben sie auch heut noch einen aufschlußreichen Einblick in das Wollen und Werden der zeitgenössischen Instrumentalmusik.”, Ibid.

¹⁵³ Ibid.

compelling autonomy of this art is today already as safely recognised as the rousing, stimulating effect that emanates from it.¹⁵⁴

Schoenberg's piece, which Bekker describes as "perhaps the most significant [for] the development of today's instrumental music",¹⁵⁵ is less about 'sensuous sound-complexion' and 'virtuosity' but about 'intellectual force' and 'logic'. His remark that we are no longer dealing with 'external function', no doubt equates the reduction of 'warm, sound-sensuous' instrumental combinations with a turn inwards, toward 'pure spiritual expression'. Once again, from a contemporary standpoint, Bekker's dichotomy seems predictable, and to say that the virtuosic element in Schoenberg's piece 'is completely turned off' is an exaggeration. Whilst the effect of Schoenberg's piece is 'rousing' and 'stimulating', for Bekker it seems to rouse and stimulate the *intellect* ('hardly a part, hardly a bar is not founded and grown intellectually out of the preceding bars') implying that it is safe to enjoy. Bekker minimizes the role of Schoenberg's orchestra by describing it in terms of its more ascetic qualities ('missing is the sensuous warm *Klang*-complexion'; 'the virtuosic element is completely turned off'; 'almost reckless hardness'), and suggesting that it is no longer external to the musical ideas — for Bekker, Schoenberg's music embodies the organicist ideal.

Given Bekker's past support of Schreker's operatic work and the considerable orchestral forces involved therein, his reaction to Schreker's piece seems out of character. Returning to Bekker's remarks regarding this performance one begins to see why this might be: "That he understands how to construct [a piece] symphonically", writes Bekker, "I know from the preludes and interludes of his operas, [and] also from the opera acts themselves" due to a dependence on a dramatic idea.¹⁵⁶ Bekker's main objection is that whilst the *Kammersymphonie* lacks any specific reference to a dramatic

¹⁵⁴ "Ganz anders geartet ist Schönbergs Werk... Es fehlt das sinnlich warme Klangkolorit die Farbe als eigenes Ausdrucksmittel verschwindet. Kontur, Zeichnung ist alles... Die Form ist von wohlberechneter innerer Gefetzmäßigkeit... Die thematische und motivische Entwicklung zeigt strengste Logik, kaum eine Stimme, kaum ein Takt, der nicht gedanklich aus dem Vorangehenden begründet und erwachsen ist... Hier spricht kein äußerer Zweck mehr mit, das virtuose Element ist völlig ausgeschaltet, Spieler wie Hörer werden mit fast rücksichtsloser Härte behandelt...[es ist] rein spirituellen Ausdrucksmusik... Wir kennen Schoenberg als Gesamterscheinung noch zu wenig, um jetzt schon feststellen zu können, wie weit der Mangel an Waerme klangsinnlichen Empfindens, der immer staerker durchbrechende Hang zu spekulativer Absonderlichkeit Schwaeche der natuerlichen Veranlagung oder bewusste Abkehr vom Gewohnten ist. Aber die in sich geschlossene, starke und trotz alles Widerstrebens durch ihre gedankliche Kraft zwingende Eigengesetzlichkeit dieser Kunst ist heut schon ebenso sicher anzuerkennen wie die aufruettelnde, anregende Wirkung, die von ihr ausgeht.", Ibid.

¹⁵⁵ "Dieses bedeutsame Werk — das bedeutsamste vielleicht, das in der Entwicklung der heutigen Instrumentalmusik zu verzeichnen ist", Ibid.

¹⁵⁶ "Das er sinfonisch zu bauen versteht, wissen mir aus den Vor- und Zwischenspielen seiner Opern, wissen mir ach aus seinen Opern akten selbst...", Ibid.

idea, one seems to be trying to “peek through again and again” due to the character of the music.¹⁵⁷ For Bekker, then, the colourful language of the *Kammersymphonie* suggests a secret dramatic plot that is more suited to the genre of the symphonic poem, or of opera — for in those genres form serves the dramatic plot, rather than following its own ‘self-contained’ principles. The ‘casual ease’ with which Schreker develops form is no substitute for the ‘absolute logic’ that Schoenberg provides: for Bekker, instrumental music requires ‘autonomous’ formal principles, and it is in this regard that he finds Schreker’s *Kammersymphonie* somewhat lacking. Bekker continues:

For this solo-orchestra, Schreker writes music which in sound-mixture and melodic leading is an unmistakable miniature refection of the “Die Gezeichneten” score, [whilst] still at the same time independent in its individuality of thematic invention.¹⁵⁸

Nor is Bekker alone in making comparisons between the *Kammersymphonie* and Schreker’s operatic projects. The critic of the *Neue Freie Presse* (12th March 1917) writes that the events in the piece are “mostly sound-events, equal in interest to the beginning with his “*Spielwerks*”-sounds”.¹⁵⁹

These analogies are problematic. In Schreker’s operas of this period, certain sound-events acquire independent meaning, and *agency* within the piece (the ‘distant sound’ in *der ferne Klang*, or the sound of the magic lute in *Der Schatzgräber*, for example). By equating certain moments of the *Kammersymphonie* with his operatic works, these writings suggest that they might function in a similar way — ascribing agency to such musical moments, even though their musical construction and function within the respective pieces are different. Writing in 1921, another critic and Schreker supporter, Rudolf Stephan Hoffmann, remarked that whilst the *Kammersymphonie* is in “the style of *Gezeichneten*”,¹⁶⁰ it is “interesting to see [the developments of the modern opera orchestra] used again for absolute music” (i.e. in the *Kammersymphonie*).¹⁶¹ Hoffmann’s stance would seem straightforward, then: that they are merely stylistically similar. However, his view begins to complicate once his analysis begins, for he refers to the predominant rising-7th motif in the *Kammersymphonie* as

¹⁵⁷ “immer wieder...hervorlugen”, Ibid.

¹⁵⁸ “Für dieses Solistenorchester nun schreibt Schreker eine Musik, die in Klangmischung und melodischer Führ[...]n eine unverkennbare Miniatur Spiegelung der “Gezeichneten” Partitur ist, dabei doch selbständig in den Einzelheiten der thematischen Erfindung.”, Ibid.

¹⁵⁹ “...zumeist Klangereignisse, wie gleich das interessante des Anganges mit seinen “Spielwerks”-Klängen...”, Universal Edition (1920, 60). Here he makes reference to Schreker’s earlier opera *Das Spielwerk und die Prinzessin*.

¹⁶⁰ Hoffmann (1921, 142).

¹⁶¹ “War im Orchester die Ausdruckskraft gereift, die die modernen Opern erst ermöglichte, so ist es interessant, hier diese gewonnene, höchst entwickelte Technik wieder einmal an absoluter Musik betätigt zu sehen.”, Bekker (1920, 141).

“Alviano’s”, in reference to the leap in *Gezeichneten*’s opening theme.¹⁶² The leap is one of the theme’s most characteristic features, yet linking the two is clearly speculative.

So far, it has seemed to be the case that the writers who use such operatic references to describe the *Kammersymphonie* do so in order to ‘justify’ what they see as a certain looseness of formal construction.¹⁶³ Yet, Hoffmann sees the piece as “a shining example for strict, tonal, motivic and formal unity [in] a work often decried as incomprehensible”.¹⁶⁴ For him the piece develops out of two ideas: the rising scalar fourth ‘*Hauptthema*’ of the Allegro vivace, and ‘Alviano’s’ rising seventh. Hoffmann’s description of the work is far removed from the earlier reviews of the work in that the basis for his positive judgement is founded on different criteria.

For the early reviewers positive comment stemmed from Schreker’s “futuristic colour-scheme” and “newest chroma”,¹⁶⁵ or as one critic remarked “a ‘*fontaine illumineuse*’ of sounds”,¹⁶⁶ in short, the sensual, physical effect of his *orchestration*. Ferdinand Pfall, in the *Hamburger Nachrichten* (15th Nov. 1918), writes an extremely positive review, along similar lines, but also adds that “the inner thematic relationships and the architecture of this music [which] strives toward biological form [...] unveils itself only through precise knowledge of the score”,¹⁶⁷ which is precisely what distinguishes Hoffmann’s brief analysis from the concert reviews. By studying the score in detail, and justifying the work through its motivic unity, Hoffmann’s aesthetic stance follows the motivic-organicist value judgements put forward in earlier arguments. Considering orchestration’s predominance (either in positive or negative judgement) in the concert reviews, it is both surprising, and somewhat disappointing, that Hoffmann hardly mentions the topic during his analysis. Right at the start we have seen that he mentions the ‘expressive’ nature of the orchestra, as well as the “silver-lined” sound of the opening,¹⁶⁸ which he breaks down into its instrumental component parts; however, he fails to

¹⁶² “mit einem aufreißenden Septimenaufsprung (Alvianos)”, Hoffmann (1921, 142-3).

¹⁶³ It appears that Schreker’s original concept of the piece was a dramatic one, as the title page of his sketches shows ‘*Tondichtung*’ written clearly, but then crossed out first in favour of ‘*Sinfonietta*’, then ‘*Serenade*’, before finally deciding on ‘*Kammersymphonie*’. See sketches from the Österreichische Nationalbibliothek, call number [F3.Schreker.133 Mus].

¹⁶⁴ “Ein glänzendes Exempel für strenge, tonale, motivische und formelle Einheitlichkeit eines vielfach als unverständlich verschieenen Werkes”, Hoffmann (1921, 145).

¹⁶⁵ “...neuesten Chroma”, “...futuristische Farbengebung...”, *Reichspost*, 12.März.1917, Universal Edition (1920, 60).

¹⁶⁶ “eine ‘Fontaine illumineuse’ in Klängen”, *Illustriertes Wiener Extrablatt*, 12.März.1917, *Ibid.*, p.61.

¹⁶⁷ “Die inneren thematischen Beziehungen und die Architektur dieser Musik...nach biologischer Form strebt...entschleiern sich nur dem genauen Kenner der Partitur.”, *Hamburger Nachrichten*, 15.Nov.1918, *Ibid.*, p.62.

¹⁶⁸ Hoffmann (1921, 142).

integrate these comments into his wider discussion, and as such they feel external to the analysis proper.

Whilst it might be the case that the *Kammersymphonie* is motivically unified, it is important to ask why this motivic unity could not be heard without reference to the score. Whilst Hoffmann's analysis is useful as a historical document—justifying Schreker's piece as motivically rigorous in an increasingly positivistic age, and as a response to the criticisms mentioned above—it fails to answer its own question lurking beneath the surface of its final lines: if the work is 'a shining example for strict, tonal, motivic and formal unity'—and Hoffmann's detailed score analysis is compelling evidence for such an argument—then *why* is the *Kammersymphonie* 'often decried as incomprehensible'? The answer lies in the timbral configurations in which this formal-motivic process is presented to the listener, the way in which ideas are masked and concealed through the work's timbral construction — there is little of what orchestral treatises would consider 'good' orchestration. A brief glance at the opening thirty bars shows melodic material is frequently passed from one instrument to another in quick succession, leading to a climax whose preceding bars superimpose motivic material so as to prevent complete clarity. Such instrumental writing fails to establish a strong basis with which to hear any unity at all; for, whilst change proliferates throughout the opening section, the instrumental changes are not distinct or abrupt enough to break through and establish individual identities or agency: in these opening bars the orchestration fails to construct a unified identity, yet at the same time fails to construct strongly distinct individual agents. Perhaps this is what the critic of the *Neue Freie Presse* meant when they suggested that the *Kammersymphonie* had "the democratic make-up of chamber music, which gives each instrument the right to a voice".¹⁶⁹ There is a sense of equality within the instrumentation (most notably within these introductory bars), and the result is frequently one of ambiguity. Lack of clear timbral distinction, alongside continually shifting metre and rhythmic emphasis (plus harmonic uncertainty), make this opening difficult to make sense of perceptually. Difficult, that is, if trying to attach a traditional motivic-formal model to the piece.

Ferdinand Pfall of the *Hamburger Nachrichten* warned against such an approach:

¹⁶⁹ "...es ist die demokratische Verfassung der Kammermusik, die jedem Instrument das Stimmrecht gibt.", *Neue Freie Presse*, 12.März.1917, Universal Edition (1920, 60).

Without doubt Schreker's *Kammersymphonie* represents a complete dissociation from the traditional, from the old styles. It is something entirely new, original and therefore cannot also be assessed from the old formalistic standpoint. (The rhinoceros will always incorrectly judge the hummingbird!) But it lives its own life and in its fullness of life lies its worth.¹⁷⁰

With this, Pfall warns against the views of those “fossilized musicians [...] and ‘guardians of the Classical ideals’, who deny the possibility of further development beyond Brahms”, and who would no doubt view the sounds of the *Kammersymphonie* as part of a “Symphony from the Chamber of Horrors [*Schrekenskammer*]”.¹⁷¹ Contemporary reviewers who placed such value on formalist construction criticise Schreker's *Kammersymphonie* for its lack of formal rigour and thematic coherence — although Hoffmann's analysis sought to rebut such criticisms with evidence to the contrary. Despite such underlying motivic and formal rigour, a number of performance reviews have described an inability to *hear* such coherence in the music — be it in Pfall's highly positive assessment, where he assumes the details will be found from closer score study; or, conversely, in Richard Robert's negatively disposed review of 7th Jan. 1918, where he described the situation thus:

[Despite the external formal condensing of the four movements into one] the whole is still without tangible structural articulation, only a few parts crystallise into solid forms: it lacks the rhythmic design [...] which forms the backbone of every piece of music, [but] here [it] vanishes due to nothing but small rhythms.¹⁷²

Robert's comment on the profusion of '*kleinen Rhythmen*' gives another clue as to the difficulty contemporary reviewers had in immediately understanding the work's formal construction: Schreker's propensity for timbrally interweaving a large number of small motivic fragments simultaneously, which results in complex polyrhythmic textures, whose independent threads are difficult to disentangle. But let us not forget that such thematic relationships in many of the 'accepted' works—Schoenberg's *Kammersymphonie*, for example—were equally embedded within the musical texture, and difficult to *perceive* without close study of the score.

¹⁷⁰ “Ohne Zweifel bedeutet Schrekers Kammersymphonie eine vollständige Loslösung vom Überkommenen, von alten Stilen. Sie ist etwas ganz Neues, Ursprüngliches und kann darum auch nicht vom alten formalistischen Standpunkt aus bewertet werden. (Das Rhinoceros wird den Kolibri immer falsch beurteilen!) Aber sie lebt ihr eigenes Leben und in ihrer Lebensfülle ruht ihr Wert.”, 15.Nov.1918, Universal Edition (1920, 62)

¹⁷¹ “...ein Werk, das fossilen Musikern und jenen ‘Hütern des klassischen Ideals’, die die Möglichkeit einer Fortentwicklung über Brahms hinaus leugnen, als ‘Symphonie aus der Schrekenskammer’ gar wunderbarlich in die Ohren geklungen haben dürfte.”, Ibid.

¹⁷² “...Trotz dieser äußeren formellen Abrundung ist das Ganze doch ohne greifbare Gliederung, kristallisieren sich nur wenige Partien zu festen Gebilden: es fehlt die rhythmische Gestaltung in höheren Sinne, der große Rhythmus, der das Rückgrat eines jeden Tonstückes bildet, hier aber vor lauter kleinen Rhythmen verschwindet.”, Richard Robert, *Wiener Sonn- und Montagszeitung*, 7.Jänner.1918, Universal Edition (1920, 61).

Double-standards are at work, but why? Was it that Schreker's reception had predominantly been as a *dramatic* composer, and thus where, previously, dramatic plot had proved the explanation for the formal shape, motivic direction, and sense of agency perceived, the *Kammersymphonie* had no such dramatic grounding (or even that an instrumental work 'should not have' dramatic intent)? Or, perhaps, like Robert suggests, it was something to do with the 'non-crystalline' orchestral presentation of Schreker's formal working, whereas the prevailing musical trend was toward the functional clarity of the 'New Objectivity'. Schreker's music resists such starkness—the ascetic 'harshness' of ideas that Bekker applauded in Schoenberg's *Kammersymphonie*—preferring instead to present its non-angular motifs in a rich orchestral setting.

What can the mixed reviews of Schreker's *Kammersymphonie* tell us? All the reviews focus on one thing: the orchestral sounds Schreker creates. Whether positively or negatively inclined, these reviews *do* emphasize the important and controversial role that orchestration played in how the work was perceived (and, as we will see, how it is still perceived today), and that the reception of Schreker's work was still clearly informed by the idea of orchestral organicism, with the idea of orchestration as ornamental and secondary to the main musical idea (either that or reviews followed Karen Painter's model: talking of intoxication, being overwhelmed, or delight in the physical sensuality of the sound at the expense of intellectual rigour).

Martin Kapeller's recent comparative essay '*Zweierlei Kammersymphonien: Über Schönberg und Schreker*',¹⁷³ whilst putting forward the same dichotomies that Bekker posited ninety years earlier,¹⁷⁴ reverses Bekker's appraisal in favour of Schreker's work. Kapeller comes to Schreker's rescue by speaking against those who disparaged the piece's 'ambivalent' nature, suggesting that such ambivalence is not accidental, but rather that "he *systematised* the un-sharp [...] Schreker composed out sound-cloudiness".¹⁷⁵ Here, Kapeller's 'systematic' justification of Schreker's style seems to be drawing upon fin-de-siècle admiration of the scientific and the rigorous. Kapeller gives an example of this "highly differentiated system of fuzziness" in the opening, where he suggests an ambivalence regarding what is perceived as fore- and background; an ambivalence of rhythm and metre (for example, the time signature is 6/8, but the flute part gives the feel of 3/4); and in the ambivalent

¹⁷³ Published in the *Österreichische Musikzeitschrift*, Kapeller (2010).

¹⁷⁴ Indeed, he makes reference to Bekker's review in his article.

¹⁷⁵ "Schreker komponiert Klangtrübungen aus, er systemisiert Unscharfe", my emphasis, Kapeller (2010, 19).

harmonic language used.¹⁷⁶ Particularly interesting is Kapeller's remark that the opening lacks "a grand gesture [...] the self-confidence to say 'I speak'", for this lack of agency—which has already been mentioned—could be included as a fourth criterion for Schreker's 'systematised ambivalence'. Kapeller frames the discourse surrounding Schreker's ambivalence against what he portrays as Schoenberg's strict (perhaps too strict) formal-motivic working: "Whilst Schönberg [wrote with] chamber music compression, but held onto to that which he calls 'Logic' [...] Schreker dissolved these [formal boundaries] and used the formal background more as a foil for his own particular '*musique informelle*'".¹⁷⁷ By making reference to Adorno's lecture of 1961 Kapeller seems to be suggesting that Schreker should be viewed as the progressive composer—working with, but not dominated by the material—whilst Schoenberg confines himself within more formulaic—'reified'—models.

Schreker's music occupies a difficult position in fin-de-siècle Viennese musical criticism, arising from a contradictory *milieu* where some saw ornament 'as crime', whilst others saw it as decadent delight and as something to be preserved — a situation epitomised and preserved by the *Loos Haus* standing face to face with the imperial Hofburg palace on Vienna's central *Michaelerplatz*. The orchestral treatise and piano transcription further engrained the idea that orchestration was expected to be an organic outgrowth from the musical idea, but it was suggested that this approach, ironically, encouraged the two elements to be seen as separable rather than unified — an idea at odds with the compositional practices of the new generation of Viennese composers.

The reason for Schreker's ambiguous position lies in the varied timbral configurations of his music: there are the massive orchestral climaxes in his earlier operas, coupled with their decadent subject matter. There is the motivic rigour that frequently saturates his work — but because this is often concealed within the layers of his orchestration, the effect is one of ambiguity. In contrast, however, there are also moments such as the opening of the *Kammersymphonie* where Schreker is extremely precise in his evocation of a sense of ambivalence, his 'highly differentiated system of fuzziness' as Kapeller called it. Here Schreker adopts an almost 'scientific' precision of timbral

¹⁷⁶ Ibid., 18-19.

¹⁷⁷ "Wo Schönberg auf kammermusikalische Verdichtung setzt, aber an dem festhält, was er 'Logik' nennt...lost Schreker diese auf und nutzt den formalin Hintergrund eher wie eine Folie für seine ihm eigentümliche '*musique informelle*'", Ibid., 19-20.

differentiation to control the level of dissonance, and to assemble musical constellations with elements that pass back and forward across the threshold of perception.

The ‘crisis of response’ is particularly keenly felt in regard to Schreker’s music, for whilst Berrsche’s comment that Schreker was an artist ‘sensitive *only* to colour’ making any attempt at a piano transcription ‘misguided’, this is an unfair generalization. Schreker’s music is frequently dense and precise in its motivic construction. The problem for reviewers such as Berrsche was that Schreker’s music often has moments whose *timbral* construction is equally dense and precise.

Vienna was a special site for the development of timbre in music, with Helmholtz’s influential scientific studies, and with Mahler, Schreker and Schoenberg pushing the limits of what the orchestra could/should do. Timbre was seen as a parameter whose full potential had not yet been realized; previously viewed as secondary, or ornamental, these developments were seen by some as widening the gap between form and content to the greater detriment of music based on an organic ideal. Comparing a work’s timbral construction with clothing, or as one writer put it “We insist that timbre is *Schmuck* [literally ‘jewellery’] and not the pillar of music”,¹⁷⁸ relegated it to an external function, less important than the internal intellectual rigor the other elements were seen to provide: “It is not that the theme”, writes Hirschfeld on the opening of Mahler’s Seventh Symphony, “which is played on the tenor horn, gains value and meaning, but rather that the tenor horn gains value and meaning because it plays a theme”.¹⁷⁹ However, the variety of responses to the works of this period—in orchestral treatises, to piano reductions, and from concert reviews—highlight that surface and depth were not objective qualities, but were highly contested in Viennese aesthetics: in music, one’s view upon where the boundary lay decided whether you saw timbre and orchestration as a technical craft, a science, or as an Art, and whether a composer such as Schreker was an Artist or an Artisan.

Timbre was an easy target since it lacked the critical and historical framework with which one could assess its worth in a way that one could with harmony. As Painter writes: “Unusual harmonies meant that rules had been broken—so the pleasure was explicable and controllable”.¹⁸⁰ Whilst the same could be said of timbre, when comparing it to the ideals set out in orchestral treatises, the level of specificity that one could go into was far less than that possible with regard to harmony. The

¹⁷⁸ Karl Grunsky, quoted in Painter (2007, 88-9).

¹⁷⁹ *Ibid.*, 96.

¹⁸⁰ *Ibid.*, 102.

perceived immeasurability and combinatorial variety of timbre as a parameter meant that using orchestral treatises as a 'rulebook' led more to a 'pass or fail' mentality rather than to examine whether (like Schoenberg hoped) it could contribute effectively to music's logic and teleological drive.

The crisis of response to timbre was particularly prominent in fin-de-siècle Vienna, due to the prominent and varied opinions on the role of ornament, and the vigour with which timbral development was taken up by many of its composers. That the Viennese debate over ornament took place most publicly with Loos in the realm of architecture is interesting, for architecture is the one art that *does* physically have both an outer surface and a hidden inner structure. That the building of the *Ringstraße*, and the surface-depth criticism that accompanied it, took place at the same time that musicology as a discipline and Schenker's organicist and hierarchical theories were forming, provide an interesting parallel. The rest of this thesis takes the crisis of response to orchestration as its contextual starting point, to see how music of this period used timbre as a constructive parameter, not just as ornamental '*Schmuck*'. It intends to examine the moments where music's orchestral presentation creates moments of tension with the conservative ideals put forward in this chapter and where Janik's idea of Viennese 'critical modernism' suggests potentially 'scathing diagnoses' of the orchestral moment that is 'bigger than life', a 'drug to get "high" on', or 'narcissistic, theatrical or solipsistic' according to fin-de-siècle Viennese standards. The following chapters discuss how we might get beyond the impasse presented by the 'crisis of response' (whilst still using these contemporary modes of response as the contextual grounding for our analyses), building on the discussion of the piano transcription, above, with specific focus on the perceived spatial qualities and sense of perspective timbre might add to the auditory scene. It will also critically examine the comparison of timbre to colour that some reviews put forward here and how a modern hermeneutic framework might allow analysis of such qualities and fin-de-siècle concerns. The final chapter returns specifically to the socially-conditioned value judgements engendered by the use of timbre at the fin-de-siècle, and suggests that such responses had become so engrained in everyday musical life that composers began to use certain timbral configurations ironically as tools to drive the work's dramatic narrative.

In this chapter I have used the idea of ornamentation to set the early stages of this project into the context of contemporary fin-de-siècle critique and the modernist and anti-modernist tensions therein. My intention is to interpret the music of fin-de-siècle Viennese composers—such as Schreker, Schoenberg, and Zemlinsky—in the light of the interactions between music and the cultural issues presented in this opening chapter. The examples I explore in the following chapters do not necessarily all work in the same way, nor do they suggest that timbre always works in the same way for each composer, even within the same piece. Rather, the examples are chosen to argue a larger point: that timbre is starting to play an important, often contested, role in fin-de-siècle Viennese music, and that this wider context opens interesting hermeneutic windows through which to interpret the more radical timbral moments from a fresh perspective.

Analysing Timbre — Contexts and Methodologies: Adorno, Enchantment, Distance, Perspective, Norms & Subversion, Subject-Position

This chapter moves toward a modern hermeneutic framework with which to assess timbre's importance in certain moments of fin-de-siècle Viennese music, one that is grounded in the historical context of that time and place. It begins with a discussion of Theodor Adorno's writings, which still subscribed to the surface-depth model popular in turn-of-the-century Austro-Germany (promoting an economy of means, and disapproving of decadence). In spite of this aesthetic bias, Adorno is one of the first authors critically to assess timbre's value as a musical parameter: its ability to subvert and critique musical norms; to enchant and deceive; and, through discussions of its links with visual art, its ability to alter the spatial perception of music via its role as a signifier of distance. The final part of the chapter examines the perceived links with fin-de-siècle visual art in more detail, and selects appropriate elements from modern analytical theories to develop Adorno's perspective. The result is an analytical framework that helps to assess the constructive nature of timbre, its spatial qualities, and its role in shaping musical subject-position in the music of fin-de-siècle Vienna.

Adorno's written output frequently discussed timbre and orchestration. Sheinbaum's 'Adorno's Mahler and the Timbral Outsider' (2006) notes that such a perspective is largely absent from the secondary literature, and highlights Adorno's far-reaching concern in this respect:

A subtext runs through Adorno's comments: the conventional construction of tone colour as merely surface, and as subordinate to the supposed true substance of the piece as a whole, can be critiqued. [...] colouristic music is not enough; a wash of sound that makes no claims to structural importance does little to subvert expectation, no matter how prominent timbre might seem. And, on the other hand, deploying colours solely to buttress structure, as in much twelve-note music, by marking statements of a note-row or important portions of a series with repeating colours, results in machine-like mannerism.¹⁸¹

¹⁸¹ (Sheinbaum 2006, 41).

As evidence for this ‘subtext’, however, Sheinbaum cites only a limited number of sources — referring to some rather short extracts on Stravinsky, Schoenberg, and Schreker.¹⁸² The nine pages that Sheinbaum cites hardly seem justification enough, considering Adorno’s vast output, for his claim that timbre is “referred to again and again”¹⁸³ in Adorno’s writing. Sheinbaum’s list omits numerous passages of considerable length and depth relating specifically to timbral matters: it should, in fact, include most of Adorno’s 1959 *Schreker* essay (rather than the two pages Sheinbaum highlights); a number of remarks on Alban Berg, Richard Strauss, and Maurice Ravel; but most importantly Adorno’s detailed views on the orchestration of Gustav Mahler (the main subject of Sheinbaum’s discussion) and the chapter-length discussion on the instrumental ‘colour’ of Richard Wagner’s music.¹⁸⁴

For Adorno, orchestration is clearly ideologically distinguishable from that of the musical Idea, though this is not to say that he sees the relationship as fixed. Rather, that the fluid relationship between a ‘musical idea’ and its ‘orchestration’ allows, in Adorno’s view, certain combinations to be more acceptable than others.

As Sheinbaum notes, the subtitle of Adorno’s *Mahler*—‘a musical physiognomy’—is particularly relevant for timbral concerns given the contemporary view of timbre as a surface feature:

The term ‘physiognomy’ does not imply merely a collection of facial features, but rather the potential for revealing and judging the deepest levels of character precisely from that surface[.] A metaphorical use of physiognomy [...] became an important mode of inquiry for Adorno and his intellectual circle [...] Instead of ignoring surface features as irrelevant distractions, Adorno argues that one can get at the deep essence of Mahler precisely by exploring [...] surface features of the music.

¹⁸² Sheinbaum cites *Quasi una Fantasia*, trans. Livingstone (Adorno 1998), pp. 167-8 for Stravinsky; 238-9 for Schoenberg; and 135-6 for Schreker. He also cites the short section from *Philosophy of New Music* (Adorno 2006, 68-70).

¹⁸³ Sheinbaum (2006, 41).

¹⁸⁴ Entire *Schreker* essay (Adorno 1998, 130-44). Remarks on Berg can be found in *Alban Berg: Master of the smallest link*, trans. Brand and Hailey (Adorno 1994), especially p. 23, the section on the Altenberg Songs (62-6), and the Orchestral Pieces (72-83). Interesting remarks can also be found in the chapter ‘The Orchestration of Berg’s Early Songs’ from Adorno’s *Klangfiguren* (Adorno 1999, 80-90). Remarks on the orchestration of Richard Strauss can be found sporadically throughout Adorno’s writing, but more specifically in the first half of his essay on the composer (Adorno 1965). Adorno’s short essay *Ravel*, trans. Hoban (Adorno 2009) takes Ravel’s orchestral mastery as its central theme. The most important of Adorno’s discussions of Mahler’s instrumental usage can be found in *Mahler: A Musical Physiognomy*, trans. Jephcott (Adorno 1992), chapters 1: ‘Curtain and Fanfare’ (2-17), 3: ‘Characters’ (40-59), 5: ‘Variant-Form’ (82-105), and 6: ‘Dimensions of Technique’ (106-121). The most telling omission on Sheinbaum’s list is actually one of the most important: the chapter-long discussion of Wagner’s orchestral usage from *In Search of Wagner*, trans. Livingstone (Adorno 2005b), chapter 5: ‘Colour’ (60-73), which leads into, and forms a fundamental aspect of, the chapter 6 discussion of ‘Phantasmagoria’ (74-85).

[...] within Adorno's interpretation [...] orchestral colour, traditionally considered superficial and extraneous to music's deep structure, play an important part [...] the relationships between timbre and form are not mute, restricted to the work, but speak to both Mahler's and Adorno's society. By playing on and critiquing the notion of form as deep (inside the heart of the music) and timbre as surface (outside that core), Adorno evokes the dichotomy between societal insiders and outsiders. Such a split has arguably been part of all civilizations, but contemplating the implications was [an important] task in both Mahler's *fin-de-siècle* and Adorno's post-Second World War contexts.¹⁸⁵

Sheinbaum indicates the relative ease with which Adorno's critique of timbre maps onto an important aspect of *fin-de-siècle* society, namely that a "formerly pure and whole society [felt] threatened by the intrusions of sinister, suspect cultural outsiders".¹⁸⁶ However, Adorno's critique is not that such 'intrusions' are always negative, but rather that "the particular individual—mapped onto particulars in the music like timbre—can stand up to the universal[, and] that free expression can still exist."¹⁸⁷ For Adorno, Mahler's music exposes the 'untruth' of the sense of sublime triumph found in many artworks of the time, and as a result it "ranks higher" because it is "more deeply [...] steeped in the contradictoriness of the world", i.e. in the constant tension between the individual and the collective.¹⁸⁸

Such considerations are at the heart of Adornian thought, and by using such a hermeneutic framework Adorno updates and makes relevant the timbre-idea dichotomy so often used by conservative critics in *fin-de-siècle* Vienna. Rather than naïvely stating that musical form and content is of great importance, and timbre superficial and secondary (although undoubtedly this lurks in the background), Adorno equates their relationship not as depth and surface, but as a dialectical power struggle between the two elements of the music's 'physiognomy'.

The following pages serve to outline Adorno's main thoughts on timbre and orchestration, concentrating mainly on the longer, more detailed, passages devoted to Wagner and Mahler. In these passages Adorno highlights the negative power of orchestration to deceive (Wagnerian & Schrekerian *Phantasmagoria*); but also its positive power to critique empty form (Mahlerian

¹⁸⁵ Taken from Sheinbaum (2006, 38-9), and its earlier form in Sheinbaum (2002, 262).

¹⁸⁶ Sheinbaum (2006, 42).

¹⁸⁷ *Ibid.*, 43.

¹⁸⁸ Adorno quoted in Sheinbaum (2006, 43). Original quotation found in Adorno (1992, 6).

Durchbruch) and its power to elucidate detail (Berg). From this discussion an evaluation of Schreker's orchestral usage, with particular attention to Adorno's *Schreker* essay (1959), can take place.

For Adorno, it is clear that the problem of music and timbre is in fact one of *perception* (and often, therefore, *deception*). His discussion of Richard Strauss gives numerous supporting examples:

[His music presents] the familiar as something new [...] it dupes the *bourgeoisie* into believing it to be both better than and different from what it is.¹⁸⁹

If the traditional ideal of composition sought to produce a maximum of forms out of a minimum of "givens", it thereby sanctioned the pretence of making the few seem like the many. This concealment, a dishonesty of honest composition, was visibly underlined by Strauss [...] Presentation is thus put in a disproportionate relation to its own material [... this] principle flourishes in the score of *Ariadne*, where a chamber orchestra is made to sound like its large and opulent predecessors.¹⁹⁰

Strauss was probably the first to transplant the notion of "sensation," already widespread in the literature of the time, to music; it was meant to serve as an antidote to the boredom which it at the same time presupposed...even the expression of extreme emotional states, such as *Salome's*, remains sensuously pleasant, culinary; the great happiness which music once promised metaphysically in the transcendence of the infinite idea, becomes practical, available here and now for consumption.¹⁹¹

[...] many of his scores—most obtrusively, that of *Ein Heldenleben*, but also that of *Salome*—sound simpler than they read on paper.¹⁹²

Adorno places strong emphasis on the discrepancy between the perceived qualities of music and what is actually physically present, or written, in the score. His thought is prescient in that it foreshadows much recent musicological scholarship in the empirical and ecological fields. This serves as a neat conceptual link between the first and second halves of this chapter, in which the discussion moves from the issues raised by Adorno's writings to more recent discussions of musical perception, most notably Albert S. Bregman's *Auditory Scene Analysis: the perceptual organization of sound* (1990); and Eric F. Clarke's *Ways of Listening: an ecological approach to the perception of musical meaning* (2005). It does so by examining the links between the auditory and visual arts, developing Adorno's idea of *Konvergenz* between the Arts. Bregman's model offers a more precise approach as to how one might dissect the 'auditory scene' with particular reference to timbre, and Clarke's model offers a

¹⁸⁹ Adorno (1965, 14).

¹⁹⁰ Ibid., 18.

¹⁹¹ Ibid., 23.

¹⁹² Adorno (1966, 120).

framework with which one can begin to examine how perception of timbre might affect subject-position within a musical work.

Adorno's theoretical writing, then, highlights the power, danger, and problems of orchestral usage and perception in fin-de-siècle Austro-Germanic circles. However, in doing so, it sets a challenge for modern musicology (considering its turn toward more empirical and ecological theories of musical perception), to make sense of such timbral observations, not from synthesised 'laboratory' experiments so often seen in much writing on timbral matters (either at the fin-de-siècle with Helmholtz, for example, or with much recent scientific writing that concentrates on dissecting isolated tones into their constituent parts—which of course has its own value), but rather for a return to the analysis of the perceptual and contextual issues surrounding musical works and their orchestral construction.

2.1.1—Wagner and Phantasmagoria

At the heart of the *Wagner* monograph are the central chapters on 'colour' and 'phantasmagoria'. Both chapters tackle issues of instrumental deception, but, as Nicholas Baragwanath suggests, the difference between a positive or negative judgement on Adorno's part lies in the *ends* to which the instrumental means are used. For Baragwanath, the chapter on colour provides the link between the earlier chapters that discuss Wagner's "domination of musical material (gesture, motif, and sonority)" and the later chapters which outline Wagner's "quest for the universal veneration of his art through 'magic' (phantasmagoria, music drama, and myth)".¹⁹³ The chapter on colour is a balanced assessment of Wagner's orchestrational methods when compared to the chapter on phantasmagoria which discusses the 'questionable' ends to which he uses those methods.

The opening of the chapter on colour seems to put forward a positive appraisal of Wagner's methods:

The art of orchestration in the precise sense, as the productive share of colour in the musical process 'in such a way that colour itself becomes action', is something that did not exist before Wagner. He was the first to make subtle compositional nuances tangible and to render the unity of compositional complexes by colouristic methods[.] The Wagnerian art of

¹⁹³ Baragwanath (2005, 62).

instrumentation has caught up with the harmonic arts of blending and transition, without being bound to older techniques such as diatonicism. In comparison the achievement of Berlioz was external and mechanical.¹⁹⁴

Adorno's assessment of Wagner seems particularly complimentary at this point: innovator of the 'art' of orchestration, where instrumental colour is not decorative, but contributes to the musical 'action'. Wagner's orchestration is placed on a level with harmonic techniques, and no longer categorized as 'external' or 'mechanical' — terms that imply 'craft' rather than Art. Adorno continues to praise the "[virtuosic] orchestrating-out of transitions by means of a technique of instrumental 'residues'".¹⁹⁵ Essentially this is where a transition from one orchestral group is not sudden, but rather the boundaries are blurred through overlapping of instrumental groups — a feature Adorno much admires in Berg's music. Discussing *Lohengrin*, Act I, scene 2, Adorno describes its effect as where

a 'residue' of the previous sound enters into the new one, without any hiatus. And it is the less prominent part of the previous sound, the part that had no independent existence, that functions as this residue [...] At the moment when the instruments change over the flutes merge so completely with the oboes and the English horn that what we hear is not so much an actual 'entry' as a mere timbral inflexion [...] Thus the orchestration is transformed into an integral feature of the composition [...] If the expression of this relationship had been entrusted solely to the dynamics of playing, it would have been lost[.]¹⁹⁶

Here the orchestrated transition between two musical phrases creates a more subtle effect than dynamics, harmony, or melody alone could create, and in Adorno's wider analysis of this passage the formal relations between these phrases are more clearly articulated as a result. However, despite such positive appraisals, as Adorno's writing continues his tone becomes critical as he introduces the idea of concealment in Wagner's music:

[Certain] doubling is not designed simply for additional emphasis [...] On the contrary, its function is to change the tone colour. The unison combination of flute and clarinet gives rise to floating, oscillating acoustic 'beats'. In it the specific sound of each instrument is lost; they can no longer be separated out, and the final sound gives no clue as to how it was created. It resembles the thing-like sound of the organ.¹⁹⁷

¹⁹⁴ Adorno (2005b, 60). In the first sentence Adorno is quoting Wagner.

¹⁹⁵ Ibid., 64.

¹⁹⁶ Ibid., 64, 65.

¹⁹⁷ Ibid., 63.

Doubling in unison is the “*Ur*-phenomenon” of Wagner’s blended timbres, showing an “idiosyncratic resistance to naked instrumental sound”.¹⁹⁸ Such comments echo Schreker’s famous statement that

Nothing is more disturbing to me, for example, than a celesta intruding as such; a clarinet or oboe in vulgar competition with the vocal line can assault or “cover” it in some instances more than the surging of the entire body of instruments [...I] oppose the all to clearly differentiated timbre and would like to recognize only *one* instrument in service of the opera: the orchestra itself.¹⁹⁹

This distaste for the “naked”, Adorno suggests, comes from the “fear of being reminded of [the solo instrument amongst the orchestra] and the element of injustice implicit in the totality itself”.²⁰⁰ Here we start to see hints of the *phantasmagorisch*. For Adorno, this conflict between the integrity of the individual instrument—the individual within society—and the orchestra is problematic. The objective materials of the orchestra are conditioned by the subjective desires of the composer, and in Wagner’s musical phantasmagoria the individuals within the orchestra must be subsumed within that totality:

The ‘subjectivization’ of orchestral sound, the transformation of the unruly body of instruments into the docile palette of the composer, is at the same time a de-subjectivization, since its tendency is to render inaudible whatever might give a clue to the origins of a particular sound.²⁰¹

Paradoxically, “the flight from the banal”, via orchestral colour, that Wagner hoped to achieve, thus “escaping [...] the commodity known as opera” proved fruitless, for Adorno suggests that by removing “the traces of its production [...] sound made absolute”, it “is no more immune to the taint of the commodity than was the trivial sound his art had set out to circumvent”.²⁰² The problem for Adorno, is that artworks “owe their existence to the division of labour in society”,²⁰³ but Wagner sought to remove any traces of such labour because “any such traces [remind] people too vehemently of the appropriation of the labour of other, of an injustice”.²⁰⁴

¹⁹⁸ Ibid., 68.

¹⁹⁹ Quoted in Hailey (1993, 97).

²⁰⁰ Adorno (2005b, 69). Public aversion to ‘nakedness’ in the Arts can be seen as part of a wider trend, especially if we return once again to Adolf Loos’s *Michealerplatz* building, discussed in the opening chapter. For example, A. F. Seligmann from the *Neue Freie Press*, described the building as “indecent nakedness”, 18 May 1911. See Natter and Hollein (2005, 139).

²⁰¹ Adorno (2005b, 70).

²⁰² Ibid., 71.

²⁰³ Ibid.

²⁰⁴ Ibid., 72.

For Adorno, Wagner's presentation of his music as "self-producing"²⁰⁵ is both dubious, and a centrepiece of his style:

The occultation of production by means of the outward appearance of the product—that is the formal law governing the works of Richard Wagner [...] In the absence of any glimpse of the underlying forces or conditions of its production, this outer appearance can lay claim to the status of being [...] Wagner's operas tend towards magic delusion [...] in short towards phantasmagoria.²⁰⁶

By confronting the listener with sounds whose orchestral presentation is obfuscated by the numerous elements of the sound's production, Baragwanath suggests that Wagner "fostered the conviction that his art was some form of miracle, an absolutely objective manifestation",²⁰⁷ an attempt to present art as 'nature', or, indeed, in the case of *Parsifal*, as religion.

Whereas Adorno had previously discussed moments of instrumental blending, and concealment of individual origins in Wagner's style, the phantasmagoric is something more specific and problematic. For Adorno, the phantasmagoric is "defined in terms of the medium of sound [in which] music pauses and is made spatial, the near and the far are deceptively merged, like the comforting Fata Morgana that brings the mirage of cities and caravans within reach".²⁰⁸ In particular, Adorno gives a 'technical analysis' of the *Venusberg* music from *Tannhäuser*:

Its characteristic sound is created by the device of diminution. A diminished *forte* predominates, the image of loudness from afar. It is executed by light woodwinds, [chiefly] the piccolo flute, the most archaic of all orchestral instruments[: it being] almost entirely unaffected by advances in instrumental technique. It is musical fairyland [in which] The Venusberg appears to Tannhäuser diminished in size [...] The bass instruments that mark the harmonic progression and hence the temporal character of music are lacking [...] the technique of diminishing the sound by eliminating the bass [...] confers the quality of phantasmagoria.²⁰⁹

Adorno's key objection lies with the idea of concealment and misdirection. His observation that smaller objects in the physical world often lack the lower frequencies, and his direct application of this to 'diminished' musical sounds, shows clear affinity with current ecological analytical perspectives. Also, Adorno's characterisation of the piccolo as 'archaic' is equally interesting as he is

²⁰⁵ Ibid., 74.

²⁰⁶ Ibid.

²⁰⁷ Baragwanath (2005, 63).

²⁰⁸ Adorno (2005b, 75).

²⁰⁹ Ibid.

creating a hermeneutic viewpoint that interprets this musical moment as separate—or ‘other’—from Tannhäuser. Adorno hears the *Venusberg* music as physically more distant due to the ‘diminished *forte*’ of the orchestral sound. Although hard to pinpoint exactly which moment in the opening scene Adorno is referring to, one assumes it is perhaps the moments in the orchestra where the dynamics are marked less than *forte* but where the energy and brightness of the timbre (its upper frequency spectrum) is maintained through the rhythmic vibrancy of the music which encourages an increased ‘noise’ element to the tone (increased attack strength that often comes with the performance of fast rhythms). Also, the predominantly high pitch of these sections contributes to this effect. Adorno’s ‘diminished *forte*’ puts forward the idea that Wagner’s phantasmagoric sounds might not just be interpreted as spatially distant, but also, with his suggestion that the piccolo is both prominent and ‘archaic’, as *temporally* distant and again ‘otherised’. The piccolo’s ‘archaic’ quality is not something obviously inherent in the musical sound alone; it seems rather that Adorno might be thinking of the lengthy history of the flute as a musical instrument. If we accept his hermeneutic propositions then the orchestral construction of Wagner’s *Venusberg* music creates a perceived sense of distance between it and the character Tannhäuser. In analytical terms, however, we must distinguish between those of Adorno’s propositions that are based on ‘ecological’ principles (i.e. smaller objects often have a higher frequency) and those that are subjective or contextual (i.e. the ‘archaic’ quality of the piccolo). From a hermeneutic viewpoint both are equally analytically valid if contextualised sufficiently, but the drawback of Adorno’s analysis here is that his reference to the ‘archaic’ is not sufficiently contextualised, and, ecologically, the lack of lower frequencies at this point seems to undermine his point about physical *distance*, since it is sound’s lower frequencies that can travel furthest. Though the outcome of this analysis by Adorno remains somewhat controversial in its ecological accuracy his analytical technique is important as it begins to grapple with the ecological role of timbre within the auditory scene. This, alongside contextual timbre associations, gives a strong hermeneutic framework that grounds timbre’s musical affect both in its ecological properties and its context-dependent ones. If, instead of the piccolo, Adorno had mentioned in an example the ‘pastoral’ fin-de-siècle associations with the timbre of the cor anglais, for example, then this may have been a more convincing allusion given the prominent passages in works such as the ‘*Scène aux Champs*’ from Berlioz’s *Symphonie Fantastique* or at the beginning of the third act of *Tristan und Isolde*.

If timbral analysis can ground itself in this way through contemporary contextual timbral tropes and also discuss how ecological principles might interact with these associations, Adorno's method would offer a strong starting point for a means of analysing contemporary responses to the timbral quality of fin-de-siècle Viennese music.

Of course, for Adorno, it is the *deceptive* quality of the Wagnerian phantasmagoria that is interesting, and in this instance the sound 'deceives' in that whilst Adorno makes his case for the 'distant' qualities of the sound it is present on stage, i.e. it is *not* distant. Adorno is not referring here to 'offstage' ensembles—ensembles that are *actually* located elsewhere (although Wagner *does* use these in *Tannhäuser*)—but rather to the acoustic illusion of distance, a distance that is still 'present' on stage, created by instrumental deception. It is likely that Adorno's comments about phantasmagoria are coloured by the particular setup at Bayreuth: the orchestra concealed beneath the stage; acousmatic sounds with no visible source. However, Adorno is also trying to pinpoint something within the orchestral sound itself that deceives the senses, for part of the 'magic' of the phantasmagoria is the interplay between the present and the distant — the captivating wonder of the illusion itself. Indeed, for Adorno, Wagnerian phantasmagorias are "the earliest 'wonders of technology' to gain admittance to great art",²¹⁰ epitomising the removal of time in the double sense: in the stasis of musical forward progression, through lack of a solid bass tones; and through the removal of the traces of human production through orchestral obfuscation.

Schreker appears twice in Adorno's *Wagner* monograph — once in each of the chapters mentioned above. In the first instance, Adorno cites Schreker's aversion to the 'naked' individual timbres and preference for orchestral blending, also mentioned above.²¹¹ Secondly, Adorno associates Schreker firmly with the phantasmagoric, inserting the following sentence in the middle of his introductory remarks on the phenomenon: "Until its dissolution with Schreker, the Neo-German school remained loyal to the idea of 'distant sound', as the source of acoustic delusion".²¹² Adorno's remarks on Wagner, then, can be seen as entirely relevant to the discussion of fin-de-siècle Viennese music, and particularly to the music of Franz Schreker. Indeed, closer examination of the *Schreker* essay will show that the comments regarding Wagner become central to understanding

²¹⁰ Ibid., 80.

²¹¹ Schreker, from *Meine musikdramatische Idee*, quoted by Adorno in Ibid., 69.

²¹² Adorno (2005b, 75).

Adorno's view of Schreker's music, and, in a wider sense, it will be useful as a *post-hoc* analysis of fin-de-siècle Viennese timbral usage from an author-composer who had first-hand experience of that particular time and place.

In highlighting the illusory and fantastic aspect of this music, with the concealment of its origins of production, Adorno's criticisms begin to analyze timbre's *role* within orchestral music of the time. Whilst these criticisms are often framed negatively, his analytical contributions are important from a cultural context because they seem to be one of the earliest examples of an analyst finding a way out of the impasse of the 'crisis of response' to timbre outlined in chapter 1, where response to timbre was often excessively dismissive. Adorno's comments on orchestration often focus on the acoustic-spatial qualities of the auditory scene in relation to a listening 'subject', and the idea of timbre as signifier of distance and perspective is one that will be considered in many of the pieces that this thesis looks at. Particularly relevant in this regard is Schreker's opera *Der ferne Klang*, whose plot is partly motivated by explicitly foregrounding such phantasmagoric distant sounds.

2.1.2 — Mahler and Timbral 'Breakthrough': Distance through Subversion of Compositional Norms

Whilst Adorno approaches timbre as a physiognomic, 'surface' parameter, and presents the timbral 'phantasmagoria' as a deceptive and negative construct, it is important to highlight that his analyses do not always equate surface with 'superficial'. Rather, at times (particularly in Mahler's music) he credits timbre's ability to interact with music's 'deeper' formal structure, with certain timbral moments acting as "rupture[s...] intervening from outside".²¹³ Not all timbral moments have such critical power; it is only when such moments sufficiently deviate from certain conventions and norms that they are able to comment—"from the outside"—on the musical process. It is this idea that has influenced much recent Mahler scholarship, but, as Sheinbaum suggests, it is particularly the orchestral component that makes the greatest contribution to this effect:

Adorno invites, even demands, that when discussing Mahlerian form we confront the ways the orchestral process interacts with processes traditionally considered form-defining [...] suggest[ing] that timbre adds a significant dimension to interpretation[. The] individual

²¹³ Adorno (1992, 5).

voices preventing a piece from realizing its own attempts at unity, can most characteristically be seen (and heard) in instrumental colour.²¹⁴

For such moments to be heard as deviations, the music must establish certain norms within itself (*intra*-compositional conflict), or at least subvert standard expectations raised by treatises and the wider compositional practices of the time (*inter*-compositional deviation). For example, concerning Mahler's First Symphony, Adorno suggests that

Even where Mahler's music arouses associations of nature and landscape, it nowhere presents them as absolutes, but infers them from the contrast to that from which they deviate. Technically, the natural sounds are relativized by their departure from the syntactical regularity otherwise present[. T]he tormenting pedal point at the start of the First Symphony presupposes the official ideal of good instrumentation in order to reject it.²¹⁵

Here the 'tormenting pedal point' cannot be heard as deviating from a norm implied by the composition itself, as it is the first sound we hear. Rather, it is reacting against 'official', 'good' instrumentation; Adorno compares it against an internalised learnt schema of what is orchestrally 'acceptable'. Adorno cites a letter to Natalie Bauer-Lechner, which described how Mahler only awarded this subversive sound a permanent place in his composition after testing it with a live orchestra for the first time. For Adorno, "Natalie Bauer-Lechner relates a very plausible statement indicating how far Mahler's technical method was guided consciously by such positive negation, by protest against the accepted ideal of musical beauty".²¹⁶ For Adorno this is one of Mahler's most praiseworthy elements: whilst Mahler earned "a reputation for [instrumental] mastery", he avoids "insidious [...] window-dressing" by refusing to "[adapt] to what the orchestra inflicts on [him] day by day, his ear devises countermeasures". Mahler's "frequently paradoxical combinations [...] create a sound that is as it is through preventing what would result from more conventional compositions or directions". One might argue that these 'paradoxical combinations' which Adorno uses to praise Mahler, are little different from those Adorno used to criticize Wagner or Schreker, above. However, Adorno's justification for making such a distinction comes from the assertion that, in Mahler's music, "Colour becomes a function of the composition, which it discloses; the composition in turn is

²¹⁴ Sheinbaum (2006, 46, 47).

²¹⁵ Adorno (1992, 15).

²¹⁶ *Ibid.*, 15.

a function of the colours of which it is moulded”.²¹⁷ It is of utmost importance for Adorno that the function of orchestral deviations are *disclosed* to the listener, i.e. that the listener is not ‘deceived’ or ‘enchanted’ (*passive* modes of listening), but that they are actively listening for the effect of such formal deviations. Such an approach corroborates Michael Saler’s recent historiographic re-assessment of the relationship between modernity and enchantment. Saler dismisses the accepted binary model that suggests modernism entirely rejected the idea of enchantment, and in its place puts forward an idea of modern enchantment: one that enchants and disenchants simultaneously, creates “ironic distance”, inculcates scepticism, and importantly that “delights but does not delude”.²¹⁸ Adorno encourages such a sceptical attitude, positively appraising timbral moments that—almost in spite of their enchanting qualities—have additional formal significance and musical function.

This inter-compositional deviation, which Julian Johnson describes as “the deliberate deviation from the ‘official’ norm”,²¹⁹ can be usefully contrasted and compared with Adorno’s category of ‘breakthrough’ [*Durchbruch*]. For Adorno, these are the ‘ruptures from the outside’ *par excellence*. However, in comparison to the deviations already discussed, these ruptures deviate from the norms established not necessarily from *externally learnt* norms, but rather from the norms set up from within the composition itself. Sheinbaum argues that passages of breakthrough in Mahler “characteristically use instrumental colour to announce their arrival”, setting “themselves apart from the rest of the movement”.²²⁰ Returning to the opening of Mahler’s First Symphony, after the initial moment of ‘timbral deviation’ discussed above, Adorno describes *Durchbruch*’s effect

The First Symphony opens with a long pedal point in the strings, all playing harmonics[.] A thin curtain, threadbare but densely woven, it hangs from the sky like a pale gray cloud layer[.] The ascetic asperity of the pianissimo is [...] precisely calculated[.] The tempo suddenly quickens with a pianissimo fanfare for two clarinets in their pale, lower register, with the weak bass clarinet as the third voice, sounding faintly as if from behind the curtain that it vainly seeks to penetrate. Even when the fanfare is taken up by the trumpet it still remains, as the score directs, *in sehr weiter Entfernung*[.] Then, at the height of the movement [...] the fanfare explodes in the trumpets, horns, and high woodwinds [like] a physical jolt [...] the rupture originates from beyond the music’s intrinsic movement, intervening from outside[. In] the

²¹⁷ Ibid., 116.

²¹⁸ Saler (2006, 713-14, 711, 702).

²¹⁹ Johnson (1995, 114).

²²⁰ Sheinbaum (2006, 49).

rending of the veil, his symphonies attempt to withhold it no longer, to place it literally before our eyes.²²¹

For Adorno, the concept of *Durchbruch* is a complex mixture of both perceived physical depth, and imagined aesthetic distance — but, significantly, it is a concept where timbre is of primary functional importance. The climactic moment of breakthrough is perceived not just in relation to the music immediately surrounding it, but in contrast to the spatial presentation of the opening moments. Through predominantly timbral and dynamic means, moments of *Durchbruch* collapse the illusion of distance set up by previous timbral configurations, and through their unexpectedness rupture the standard sense of teleology put forward by structural and formal paradigms.

Usually, discussions of music and spatial depth focus around a *Figur* and *Grund*, background-foreground relationship. Johnson remarks, for example, that

foreground and background are usually visual metaphors but they serve equally well in relation to hearing. The foreground is heard as being closer by being louder [...] and more clearly defined, whereas the background is heard as distant (quieter) and hazy[. Moreover, the foreground is heard against the background without disturbing it in any way (implying a spatial or three-dimensional model).²²²

However, this simple model, whilst useful in earlier discussions, fails to match the situation Adorno describes in Mahler's symphony. The situation is reversed: 'hazy' strings are foregrounded, with the 'more clearly defined' clarinets being heard through the sonic 'curtain' that Adorno describes. What Adorno is actually remarking on is the effect of partial acoustic masking — where two musical sounds occupy the same acoustic space, but are still perceivable as distinct entities.²²³ The sound of the string section covers a vast harmonic spectrum, from the lowest A of the double bass, to the highest tessitura of the violin — this 'thin curtain' creates a sound that occupies much of the listener's perceptual space, as well as dominating much of the physical space of the inner-ear's basilar membrane. As Adorno suggests, the clarinets 'vainly seek to penetrate' the acoustic curtain that Mahler has created. That Adorno describes the 'ascetic asperity' of this tone is interesting also — the quiet roughness of the sound (resulting from the decreased tone, and increased instrumental noise of the string harmonics), means that the sound, whilst present, does not fully mask that which is

²²¹ Adorno (1992, 4-5).

²²² Johnson (1999, 69).

²²³ See, for example Campbell and Greated (1987, 120-9).

'behind' it. By partially masking the sound of the clarinets, Mahler creates a sense of perspective, much as two visual objects (one partially concealed) would provide. However, Mahler's choice of the 'pale' clarinet is also interesting in this regard for its acoustic qualities are, as observed by Helmholtz, "distinguished from all other orchestral wind instruments by having no evenly numbered partial tones",²²⁴ thus creating a quality of tone which at low dynamic levels is "hollow".²²⁵ As a result the clarinet seems more distant, and less penetrative, than any other instrumental choice. The effect is heightened by spatial placement on-stage, with wood-winds literally placed 'behind' the string section. However, Mahler's placement of the trumpets actually off-stage—'in the far distance'—makes his intention clear. The trumpets with "the most penetrating qualit[y] of tone [...] in music"²²⁶ would clearly destroy the sense of depth Mahler creates in this opening moment. By providing a *timbrally* distant sound, the role of the clarinet as intermediary is clarified, resulting in a tripartite layering of sound — the last of which comes from physically outside of the orchestra. For Adorno the moment of breakthrough that occurs toward the end of the movement is a rhetorical gesture that breaks through the 'curtain' of sound, collapsing any sense of distance created at the opening, and, by doing so, "shatter[s] the walls of the securely constructed form".²²⁷ In criticising the image of traditional form, the music allows, as Sheinbaum notes, for "the inherent contradictions of a conventionally constructed piece" to be exposed, and for it "to resemble the natural world more closely".²²⁸

As a result, the timbral construction of distance and closeness in music can be perceived as useful hermeneutic tool for deconstructing music's narrative. When perceived as distant, music concerns 'the Other', yet it physically remains on stage. If, however, the aesthetic surface of the music is ruptured, and moments of breakthrough occur (forcibly and physically intruding into the listener's acoustic space), it seems as if the music is directly speaking to 'us' — a point Carolyn Abbate makes in *Unsung Voices*,²²⁹ in which she posits a distinction between *phenomenal* music (produced "by or within the stage-world"), and the *noumenal* ("for our ears alone"), which "emanates from other

²²⁴ Helmholtz (1885, 210).

²²⁵ *Ibid.*, 119.

²²⁶ *Ibid.*, 210.

²²⁷ Adorno (1998, 84).

²²⁸ Sheinbaum (2006, 48).

²²⁹ Abbate (1991).

loci”.²³⁰ The intrusion of the noumenal is seen to “fissure” the musical “membrane” — as music itself “suddenly performed”.²³¹

The opening of Mahler’s symphony imitates nature in its construction of space by what Johnson terms “acoustic resonance”.²³² The instrumentation imitates acoustic laws to evoke a sense of distance. In addition, the gesture of fanfare with its “literal quality, drawn from the realities of [...] rural life”²³³ also invokes in that space a certain sense of *place*, but a place constructed as somewhat “timeless”, “archaic”, and mysterious, due to its distant presentation²³⁴ — it is music that takes place ‘within the stage-world’. Here there are clear parallels, both in language and in ecological justification for the distant sound, with the earlier *Venusberg* example from Adorno. However, at the moment of breakthrough “the fanfare explodes”, originating “from beyond...from outside”²³⁵ — the music is heard in a fuller, immediate presentation; ‘for our ears alone’, with the sense of distance collapsed. Perhaps, in its more direct presentation and in its ecologically closer placement to the audience, the timbral ‘fissuring’ of the musical ‘membrane’ that Abbate describes is as close to ‘breaking the fourth wall’ as is musically possible in a non-dramatic musical work.

Johnson writes elsewhere that “musical space, rather than acoustical space, is only a metaphor. In the classical Western tradition, bound to notation, we think of music in the spatial dimensions of a vertical and horizontal axis”.²³⁶ However, the preceding discussion suggests that a fruitful hermeneutic perspective can be reached by removing the absolute distinction between musical and acoustic space. Johnson’s remark on the connection of notation and perception of space is one hermeneutic viewpoint: in a cultural context where listeners were strongly familiar with standardised orchestral score layout, a sense of timbral distance could be bound up with the standardised spacing of the score (for example, the distance between viola and piccolo perhaps perceived as greater than, say, that between viola and bass trombone); or, in addition, the (relatively) standardised placement of the orchestra in the concert hall (the example earlier of the clarinets

²³⁰ Ibid., 119.

²³¹ Ibid., 151.

²³² Johnson’s terminology, from discussion of Third Symphony, first movement Johnson (2009, 52).

²³³ Ibid., 53.

²³⁴ Johnson (1999, 71). See “Distance as Mystery”, (70-1).

²³⁵ Reference to this chapter’s previous quotation of Adorno’s description of Mahler’s First Symphony.

²³⁶ Ibid., 233.

'behind' the strings). Chapter 1's discussion of the use of the piano transcription highlighted the fin-de-siècle concert-goer's potential lack of close familiarity with the orchestral score. Though it might seem erroneous to assume a cultural context where fin-de-siècle listeners were familiar with standardised score placement, it is important to emphasise that the idea of aesthetic distance, in relation to tone colour, is not absolute, but rather a complex interplay between a variety of parameters: acoustic, as well as historically-conditioned. The importance of the idea of musical surface, and the related notions of depth and distance, lies in the ability to create imagined space through instrumental colour and the emulation of certain natural acoustic phenomena. Viewed as a local constant—removed from historically associated value judgements—an assembled musical surface acts as the norm from which such relative difference can be heard.

Summarising thus far: Adorno's writings propose two ideas of timbral deviation from what I have termed inter- and intra-compositional norms. The first is not counted as one of Adorno's 'formal categories', but describes moments of timbral divergence from the ideal, or accepted, compositional norms of 'standard' orchestrational practice. The example of the opening of Mahler's First Symphony served as an example, as does Adorno's following remark:

In the shrill E-flat clarinet passage in [the third movement of] the Second Symphony marked *mit Humor* (with humour), it would still be possible to make out how the section would have sounded undistorted.²³⁷

The clear timbral distortion, when compared with expected compositional technique, provides a moment of disjunction. For Adorno it is the *awareness* of such disjunction that can prove useful when critiquing 'reified' formal constructions.

The second category of timbral deviation (*intra*-compositional conflict) was found in moments of *Durchbruch*. Such moments are not necessarily timbrally distorted in the manner described above. The 'breakthroughs' that Adorno describes in the First Symphony, or in the second movement of the Fifth Symphony, both feature standard brass ensembles. What is important for the concept of *Durchbruch* is that they deviate substantially from the timbral norms set up within the work itself. By deviating from inter- or intra-compositional norms these two ideas provide two ways in which timbral construction can be seen to allow the work to comment upon itself; an idea Adorno was

²³⁷ Adorno (1992, 89).

particularly keen on. Given Schreker's preference for the mixed ensemble, moments of Mahlerian brass-ensemble *Durchbruch* might be difficult to find in his music. However, modification of the Mahlerian prototype, and applying the ideas of timbral deviation and distortion, will provide a strong historically-grounded framework with which to untangle aspects of musical distance and space in Schreker's work, and the work of other fin-de-siècle Viennese composers.

2.1.3 — Suspension vs. Phantasmagoria in Schreker's Music

Before concluding this section, a final point about another of Adorno's formal categories, 'Suspension', and its comparison with the idea of phantasmagoria, is useful as a means of interpreting an often timbrally-defined concept which often appears in fin-de-siècle Viennese music. In his discussion of Schreker, Adorno rarely uses the term 'suspension', which he views as a positive description. Instead, the negatively-charged term 'phantasmagoria' is often used. I would argue that the elements which Adorno counts as positive, or constructive, in his concept of musical 'suspension' can also often be found in the timbrally-constructed phantasmagoria and therefore are not always as negative as Adorno suggests.

Like phantasmagoria, the suspension is often a section in which musical process is put on hold: "compos[ing] out the old *senza tempo*" as Adorno described it, with Sheinbaum describing such moments as "planes of sound set aside from the movement proper".²³⁸ As an example, Adorno gives the posthorn episodes in the third movement of Mahler's Third Symphony. According to Adorno, such moments differ from the negative phantasmagoria in that "they are self-reflections".²³⁹ Sheinbaum notes that

it is the timbral difference [...] and static textures, which seem to be the irreducibly defining qualities of the [Suspension] sections[.] The stillness and solemnity of the suspension passages is wholly different from the affect of the rest[.]²⁴⁰

Adorno's positive stance on moments of Suspension seem to stem from his view that Mahler's orchestration is free from unnecessary "luxuriation in color";²⁴¹ orchestration, which, "by the criteria

²³⁸ Ibid., 41.

²³⁹ Ibid., 43.

²⁴⁰ Sheinbaum (2006, 61).

of Wagner or Schreker, appears dry or incorporeal”.²⁴² Mahler’s sound does not often conceal its origins, or deceive: “every principal part is unconditionally, unmistakably audible [...] nothing confuses the musical sense”.²⁴³ However, by looking beyond Adorno’s prejudices, the phantasmagoric moments of Schreker’s music might be appropriated positively into the category of Suspension. Though such phantasmagoric moments contain radically different surface configurations, they might be seen—*pace* Adorno—to comment on the musical structure in exactly the same way due to their contrasting ‘suspension’, or perceptual slowing, of the music’s forward momentum (through lessened emphasis on goal-orientated harmonic-melodic construction and greater emphasis on parameters such as timbre, that in an early fin-de-siècle context were rarely called upon to function in a goal-orientated fashion independent of a harmonic-melodic underpinning).

Both Adrian Daub and Sherry D. Lee, in their articles on Adorno’s *Schreker* essay,²⁴⁴ highlight his seemingly damning criticism that

In general, like Wagner’s other successors, what Schreker borrowed from Wagner was the element of the phantasmagoria which he then made into the centrepiece of his own style.²⁴⁵

Christopher Hailey, surprisingly, does not mention the notion of phantasmagoria in his account,²⁴⁶ instead choosing to focus on Adorno’s view that

Klang [ran] through [Schreker’s] entire *œuvre* like a red thread[.] The sound not only forms the subject and symbolic theme of the work, but also musically, as the unity of harmony and instrumental timbre, it was more important in his eyes than every other dimension of composition.²⁴⁷

As Lee notes, it is “for this reason [that] Adorno condemns him as a purveyor of mere sensuous sonority, ‘complete with kitsch and a halo’”.²⁴⁸ She also continues to suggest that Adorno’s seemingly complex relationship with Schreker (for the essay is not entirely damning) stems from the influence of Berg, whose views on Schreker, though “generally friendly”, were “tinged with a professional

²⁴¹ This quotation comes from a remark by Paul Bekker in *Gustav Mahlers Sinfonien* (Berlin, 1921), quoted by Adorno: “Mahler’s orchestra takes no part in the New German School’s luxuriation in color. What is decisive in Mahler’s instrumentation is the contour. Anything colourful is treated with almost contemptuous severity and disregard.” Adorno (1992, 116).

²⁴² Adorno (1992, 116).

²⁴³ *Ibid.*, 117.

²⁴⁴ *Adorno’s Schreker: Charting the self-dissolution of the distant sound* (Daub 2006); *A Minstrel in a World without Minstrels: Adorno and the Case of Schreker* (Lee 2005).

²⁴⁵ Adorno (1998, 132).

²⁴⁶ See *Afterword* in *Franz Schreker, 1878-1934: A Cultural Biography* (Hailey 1993), especially pp. 316-22.

²⁴⁷ Adorno (1998, 133-4).

²⁴⁸ Lee (2005, 643) quoting Adorno (1998, 138).

ambivalence”.²⁴⁹ She cites Berg’s preparation of *Der ferne Klang*’s piano-vocal score, which Schreker felt to be too difficult; Berg’s animosity toward Schreker at the Viennese premiere of Schoenberg’s *Gurre-Lieder*; and the Schreker parody in Act 2, Scene 2 of *Wozzeck*. For Adorno, Berg’s orchestral writing is the ideal antidote to the Schrekerian-Wagnerian phantasmagoria. After discussing the similarities in “sonoral design” between Schreker’s *Gezeichneten* prelude and the opening song of Berg’s *Altenberg Lieder*, Adorno describes the problematic differences:

Schreker’s sound virtually eradicates the individual colors in its shimmering totality, they are perceptible only as momentary reflexes within a homogeneous sound. The nature of Berg’s mixed-sonority, on the other hand [...] is such that while the simultaneously juxtaposed colors likewise blend into a whole, they at the same time remain unhomogeneous, independently layered: mixed sound without mixture. [Berg’s introduction] is far more profoundly infused with the idea of chamber music than is Schreker’s conception, in which, according to Schreker himself, the orchestra is to sound like a single instrument.²⁵⁰

For Adorno, then, Berg’s orchestral conception offers (as does Mahler’s) a Utopian vision where individual instruments can work together as a whole, whilst still retaining their individuality; all this in stark contrast to the totalitarian orchestral methods of Wagner and Schreker, who sublimate the individual within the whole. If this is the case, Daub asks, “How” can Schreker, “who has made ‘phantasmagoria’ the ‘one and all’, [...] inspire a positive valuation from Adorno?”²⁵¹ Lee’s response is to suggest that the phantasmagoria, in “pretending to transcend the dominating regime of modern culture”, provides “exactly what is needed” in attempting an escape from the negative social force of commodity capitalism.²⁵² However, Daub suggests the answer lies in the fact that “phantasmagoria function[s] differently in Schreker than in Wagner”,²⁵³ suggesting that Schreker’s use of the phantasmagoric concept has become “so comprehensive as to draw attention to itself”.²⁵⁴ Thus, the listener somehow becomes *aware* of the phantasmagoric nature of Schreker’s music, and, in doing so, the ‘magic’ is not destroyed, but rather critically reflected upon. As Daub concludes:

The relationship of the Schreker[ian]-sound to phantasmagoric identity is thus an ambivalent one. On the one hand it produces gorgeous phantasmagoric soundscapes, on the other it

²⁴⁹ Lee (2005, 643). Adorno’s strong admiration for Berg can be found throughout the *Berg* monograph (Adorno 1994).

²⁵⁰ Adorno (1994, 64-5).

²⁵¹ Daub (2006, 259).

²⁵² Lee (2005, 656).

²⁵³ Daub (2006, 259).

²⁵⁴ *Ibid.*, 259-60.

produces them not as dreamlike, but *as a dream*, giving the sleeper an unnerving glimpse at the fact he is dreaming.²⁵⁵

Daub's remarks are pertinent in that they recall Saler's discussion of modernism and enchantment, that moments of Schrekerian phantasmagoria 'delight but do not delude', and that the listener is frequently aware that they are being enchanted. The responses to Schreker's phantasmagoric sounds highlighted in chapter 1 described the generally sceptical attitude adopted by listeners. It is therefore possible to argue that through such a 'modern' response to enchantment, where listeners 'delighted' in Schreker's phantasmagoric moments but queried their formal function, one can find the seeds of Adornian thought regarding his category of Suspension. Reviewers, as we saw, remarked on the motivic and harmonic stasis of such moments; Adorno took the next step by suggesting that it was precisely the disjunction between these moments of stasis and the forward-moving musical material that surrounded them which allowed the music to create a satisfactory musical critique of standard musical forms. Not all Schrekerian phantasmagorias function in this way, but this structural contrast can certainly be heard in the opening bars of the *Kammersymphonie* and in Fritz's distant sound in *Der ferne Klang*. Both examples demonstrate moments of temporal stasis and the illusion of distance through their timbral-harmonic and motivic construction. Schreker's opera, *Der ferne Klang*, is discussed in greater detail at the end chapter 3, but for the brief comparison required here the second bar of appendix 3a shows the particular moment often referred to as the 'distant' sound. At this point in the opera Fritz is hearing the distant sound that he searches for throughout the opera, a sound to which no other protagonist in the opera is privy. The point of Schreker's phantasmagorias is not that they delude the listener, but that the listener is *aware* that they are being 'deluded'. Heard in this manner, Fritz's static, suspended, *ferne Klang* serves the dramatic narrative by musically demonstrating his own spellbound delusion and fascination with the sound that haunts him (in contrast to the radically different timbral-harmonic construction of the music that surrounds this moment). Those who critique Schreker's opera due to its overuse of 'intoxicating' sound combinations fail to realise that the dramatic narrative requires this ironic distance on behalf of the listener, and that the underlying moral of the story is one that criticizes the pursuit of the decadent Schrekerian *Klang*. In a similar way, Adorno's category of Suspension creates a useful hermeneutic

²⁵⁵ Ibid., 271.

window when analysing the *Kammersymphonie* opening (and moments where the same idea returns) — for it is through the continued return to these moments of timbrally-configured harmonic and motivic stasis at important structural junctures that one can suggest that the piece is not just concerned with ‘delightful’ timbral configurations, and that it is formally shaped not just by the standard musical means but by its fluctuating temporal contrasts, and that such phantasmagorical moments (as Adorno describes them) actually function as moments of Suspension.

Certain elements of Adorno’s analyses and value judgements are bound up in the fin-de-siècle rhetoric that saw enchantment and deception as incompatible with modernist art. However, Adorno’s work is an important milestone in timbral reception as he was one of the first to highlight the important role it had begun to play in fin-de-siècle musical composition. Underpinning the ‘crisis of response’ in fin-de-siècle Vienna was also an excitement about the new possibilities that such timbral writing opened up. Adorno’s work sits on the boundary between those who saw the crisis of response to timbre as a moment of moral panic, and those composers who fostered the idea that musical composition was entering a new and exciting phase where the timbral parameter would take on new functions and no longer be classed as a parameter of secondary importance.

2.1.4 — Adorno’s *Konvergenz* between the Arts: Timbre’s Spatial & Temporal Role

24.I.1899: Lesson with Labor. He says “I’m expunging all the Secessionism, all the embellishment from your songs, because they shouldn’t be only for the benefit of your painter-friends. All truly musical people should appreciate them.”

— Alma Mahler, Diary Entry²⁵⁶

True, there is a distinct if virtually ineffable tie between *Jugendstil* and the Viennese Secession, on the one hand, and many works by Mahler, Schönberg, Zemlinsky, and Schreker on the other, but we cannot pinpoint it technically without doing interpretive injustice to these pieces[.] No matter how we bend the terms, it is hard to imagine a category linking the primacy of “sonority” (meaning the fusion of harmony and instrumentation) in fin-de-siècle music and the bold outlines of *Jugendstil*.

— Carl Dahlhaus, *Nineteenth-Century Music*²⁵⁷

²⁵⁶ Mahler-Werfel (1998, 88).

²⁵⁷ Dahlhaus (1989, 332).

Having suggested that timbral construction can affect the spatial perception of a musical work, Adorno's essay *Über einige Relationen zwischen Musik und Malerei* (1965)²⁵⁸ critiques the frequent comparison of music and visual art, and suggests the idea of 'convergence' [*Konvergenz*] as a means to differentiate useful parallels from those he sees as uncritical and superficial — precisely the false similarities Dahlhaus that warns against. The problem for Adorno is that the two art forms differ in their essential natures: music is "a temporal art" [*Zeitkunst*], i.e. one that "unfolds in time [...] and must create temporal relationships";²⁵⁹ and that, conversely, painting is "the spatial art" [*Raumkunst*], one that has the ability to "rework" space — to both "dynamize" and "negate" it. However, it is not a simple opposition, for Adorno also talks of "sedimented *time*" in painting and the "equally constitutive relationship of music to space".²⁶⁰ The aim of each art form, according to Adorno, is a "self-transcendence",²⁶¹ an ideal balance, between its own essential realm, and the other: for music, "the ideal of its spatialization", and art, its "transcendence toward time".²⁶² That these 'ideal' elements are described as 'sedimented' is important, for Adorno sees these elements as immanent ones, and elements which are activated in the process of listening or viewing. In painting, the greater the "tension" between the elements, "the more time is stored up [with]in it."²⁶³ Viewing of the painting takes place in time, and as such "the act of standing in front of [the painting], awakens [...] the time that is implicit within" its spatial tensions.²⁶⁴ Some music is obviously spatial—"the double choirs of San Marco", for example—but

even when music forgot its spatial aspect, it did not divest itself of it. Bruckner's orchestra would not be what it is, in purely musical terms, if it lacked the element of the embracing, of the forest of tones that arches over the listener.²⁶⁵

In addition, Adorno suggests that the spatialization of music taking place during the listening process, might—as Johnson suggested above—also be preconfigured through the listener's familiarity with the notational geography of the musical score, which sets out notions of

²⁵⁸ "On Some Relationships between Music and Painting", translated in Adorno (1995).

²⁵⁹ Adorno (1995, 66).

²⁶⁰ *Ibid.*, 69.

²⁶¹ Adorno (1995, 66).

²⁶² *Ibid.*, 66, 67.

²⁶³ *Ibid.*, 69.

²⁶⁴ *Ibid.*, 70.

²⁶⁵ *Ibid.*

instrumental distance according to very specific conventions — conventions that have changed extremely little over the centuries.²⁶⁶

Despite the arts “gradually becoming more similar”²⁶⁷ throughout history, Adorno warns against making comparisons between the arts that superficially try to imitate one another, and to this end he proposes the category of *Konvergenz*:

The moment one art [merely] imitates another, it becomes more distant from it by repudiating the constraint of its own material, and falls into syncretism, in the vague notion of an undialectical continuum of arts in general...The arts *converge* only where each pursues its immanent principle in a pure way.²⁶⁸

Walter Frisch’s recent book on music and the visual arts within (Austro-)German modernism,²⁶⁹ takes Adorno’s idea as a central tenet, outlining eloquently why it proves useful as an analytical concept:

Convergence, though not ironclad as a category of music-art relations, is thus a useful heuristic construct. It is more powerfully suggestive than affinity or analogy, and it implies a deeper connection between arts than parallelism. Convergence can reveal points of contact between two (or more) arts without necessarily imputing anything as concrete as influence or intention.²⁷⁰

It is a warning to analysts about making superficial connections as much as it is a warning to artists against the “crass infantilism” of attempting to imitate another art whilst “forgetting [...] what has been achieved”²⁷¹ by the original art-form through its historically-formed material.

Frisch argues that Adorno’s arguments are particularly relevant when discussing the fin-de-siècle period due to the continuing legacy of Wagner’s *Gesamtkunstwerk*. Adorno saw Wagner’s nineteenth-century model as a “utopian dream”; as “mixed-media” rather than true convergence because the material used was not ready to be treated in such a fashion.²⁷² However, as art moved toward abstraction, and music “contract[ed] all its imitative moments [and] programmatically descriptive elements”,²⁷³ Adorno saw a stronger possibility for *Konvergenz*.²⁷⁴

²⁶⁶ Ibid., see p. 70, and 66, respectively.

²⁶⁷ Ibid., 67.

²⁶⁸ Ibid.

²⁶⁹ Frisch (2005).

²⁷⁰ Ibid., 90.

²⁷¹ Adorno (1995, 68).

²⁷² Ibid., 74.

²⁷³ Ibid., 71.

²⁷⁴ See Frisch’s discussion in Frisch (2005, 90ff.)

Early fin-de-siècle Vienna seemed the natural place for the idea of the *Gesamtkunstwerk* and the blending of the arts to develop, with creative ferment to be found in the multi-disciplinary exchanges of the social circles that frequented the Viennese *Kaffeehäuser*. Edward Timms writes that

the crucial feature is that the[se] circles intersected, ensuring a rapid circulation of ideas. This model of creative cross-fertilisation helps to explain the extraordinary contribution to 20th-century civilisation that has made the Vienna of 1900 so renowned.²⁷⁵

In addition, there was also the tendency of the Viennese Secession towards synthesis of the Arts. For example, the XIVth Secession exhibition (1902) paid homage to both Beethoven and the artist Max Klinger:

In an explicit Wagnerian synthesis, 21 artists worked to restore the connections among architecture, painting, sculpture and music, to rejoin the sister arts in an act of homage[.] Klinger's multi-material sculpture of the composer formed the centre [of] the exhibition and was immediately preceded by Klimt's *Beethoven* frieze. For the opening of the exhibition, Gustav Mahler conducted his own wind-band arrangement of the 'Ode to Joy' [...] making the metaphor of music, that runs throughout the exhibition, audible and tangible.²⁷⁶

Music then, in its *sounding* form, played a relatively unimportant part in the exhibition, but as an inspirational starting point, it seemed highly productive.

The perceived overlap of music and visual art was strong, and a number of recent theorists have attempted to explore the relationship between the two. In such discussions *Jugendstil*, *Art Nouveau*, and *Secessionstil* are often considered synonymous in terms of style,²⁷⁷ only denoting a difference of geographical location. Walter Frisch defines the main characteristics:

Historians of art and design seem to agree on at least three basic elements of *Jugendstil*: the primacy of the dynamic, flowing line; flatness or two-dimensionality (*Jugendstil* has been called a *Flächenkunst*); and the profuseness of ornament [...] neatly embodied in the 1900 drawing by Theodor Heine.²⁷⁸

²⁷⁵ Timms (2009, 15).

²⁷⁶ Shaw-Miller (2009, 25-6).

²⁷⁷ See, for example, the interchangeable use of terms in the papers of the 1984 conference report entitled 'Art Nouveau and Jugendstil and the Music of the Early 20th Century'. *Miscellanea Musicologica*, Adelaide Studies in Musicology, Vol.13 (1984).

²⁷⁸ Frisch (1990, 140).



Figure 2.1 — Theodor Thomas Heine, *Serpentinantänzerin*, (Berlin 1900)²⁷⁹

From reading Frisch’s description, and examining the Heine drawing, it is clear why Dahlhaus raised the objection that the term ‘Jugendstil’ fails to adequately describe music which favours the ‘primacy of sonority’ — music such as Schreker or Mahler’s. Dahlhaus’s objection is supported most strongly by the elements of Heine’s drawing that Frisch does not highlight: the equal presence of white, *empty* space between the lines; and the lack of *colour*. Nevertheless, writes Dahlhaus, the term Jugendstil has been applied to a “suspiciously wide range of composers”—his list includes Schoenberg, R. Strauss, Mahler, Berg, Zemlinsky, Schreker, Debussy, and Scriabin—“indeed”, he continues, “any piece with flowing line, decorative surface or rich orchestral colors”.²⁸⁰ Most frequently, however, discussions of Jugendstil and music focus on the early piano lieder of such composers.²⁸¹ Frisch’s reasoning is that “from the viewpoint of genre and social function, the lied perhaps comes closest to fulfilling the Jugendstil goals of the [total] aestheticization of life and home.”²⁸² Whilst a valid point, it still fails to account for the problematic association, outlined by Dahlhaus, of rich orchestral music and Jugendstil. Whilst Heine’s drawing exudes sensuality it does so through the energized use of line, and the paradox of capturing such an energized gesture as a single moment in time — a tension that creates the ‘sedimented time’ Adorno spoke of. This suspension of time to dwell on the normally transient sensual moment clearly follows the Aestheticist creed, and comparison could easily be made to the moments of Suspension and Phantasmagoria in Schreker and Mahler, mentioned above.

²⁷⁹ Ibid., 141.

²⁸⁰ Ibid., 142, critiquing Hans Hollander’s seemingly all-encompassing discussion, in *Music und Jugendstil* (1975).

²⁸¹ For example, Walter Frisch’s *Music and Jugendstil* (Frisch 1990); Zoltan Roman’s *(Musical) ‘Jugendstil’ Revisited* (Roman 1999); and in the writings of Reinhold Brinkmann, and Ludwig Finscher in University of Adelaide (1984).

²⁸² Frisch (1990, 147).

However, the problem with this comparison is the prominent use of a rich orchestral palette of sounds which fail to square with the ascetic white empty spaces found in Jugendstil line drawings such as Heine's. A uniquely Viennese solution, however, can be found in the art of Gustav Klimt.

As leader of the Viennese Secession movement, Klimt's art was highly regarded, and well-known — if not equally controversial on account of its frequently sensuous, highly decorative, or overtly sexual nature.²⁸³ Klimt's *Portrait of Adele Bloch-Bauer I* (1907) seems entirely different to Heine's *Serpentine Dancer*, yet the three essential qualities of Jugendstil that Frisch outlined can still be found: the profusion of ornament, the use of flowing line, and the flattening of perspective. What is different is that the *primacy* of line has been questioned and that there is no longer 'empty' space — line is now a resultant parameter, implied where the various textures meet (some more perceptibly, or perhaps more 'dissonantly', than others). Now there is a primacy of *texture*:



Figure 2.2 — *Portrait of Adele Bloch-Bauer I*, Gustav Klimt (1907)²⁸⁴

In comparison to the Heine drawing, Klimt's reduced primacy of line, and increased textural detail, lessens the sense of movement in the painting. Ornament dominates, the energy of the flowing lines is reduced, and, as a result, the 'sedimented' temporal dimension of the work is diminished. Rather than giving the impression of a fleeting sensuous moment captured in time (as the Heine did),

²⁸³ For the most in-depth account of Klimt's controversies, see (Schorske 1981), chapter five (208-78); or alternatively Peter Vergo's account in *Art in Vienna 1898-1918* (1993).

²⁸⁴ Public domain image, originally from the DVD *The Yorck Project: 10.000 Meisterwerke der Malerei* (2002), now available on Wikimedia Commons.

Klimt's piece has reduced this temporal dimension to a minimum, and, with the momentum of the line diminished, the portrait acts more as a moment of sensual *stasis*, much more akin to the idea of Adornian suspension. Comparison to moments of Schrekerian *Klang* is clear, with its mixed timbral figurations that fluctuate between blending with the whole and retaining their individual identities, and the reduced primacy of any melodic line as it, too, blends and separates from the accompanimental figurations. 'Konvergenz' can be seen between the two art forms as the temporal element in both is almost negated through the reduction in the primacy of (melodic) line. In addition, Klimt's painting plays with perspective through its use of three-dimensional painting for Adele Bloch-Bauer's hands and face, but 'flattens' the perspective in the rest of the painting by using textures for the foreground and background that blend due to their similarity of colour and pattern — as a result dress, aura, and rear wall blend into a single layer. Laura Dolp's recent work makes a strong case for timbre as the signifier for musical perspective through the interaction of different timbral strata: "[musical] planes are established through the reiteration of similar timbres[.] Contrasting instrumentation [...] constructs strata of nearness and distance"²⁸⁵ relative to the timbral norms set up by the particular work in question. Much like Klimt's use of perspective, the Schrekerian *Klang* lacks any clear distinct timbral strata, and, as a result, fails to construct a sense of perspective in the auditory scene.

Whilst Dahlhaus's suggestion that notions of Jugendstil—as defined by Frisch, et al.—may not prove a productive comparison (attempting to link Jugendstil's 'bold outlines' with music, such as Schreker's, that gave 'primacy to "sonority" and the fusion of harmony and instrumentation', is problematic), Klimt's later style offers a more robust comparison, one that seems to offer elements of *Konvergenz*, particularly between the reduction of the temporal dimension through the reduced primacy of line, and the flattening of perspective between Figure and Ground.

2.1.4.1 — Figure & Ground

The attempt to draw association—rightly or wrongly—between Schreker and the Vienna Secession, and particularly Klimt, is not just a recent phenomenon. In 1921, Julius Korngold

²⁸⁵ Dolp (2010, 266, 267).

remarked on Schreker’s “secessionistically entangled sound”;²⁸⁶ later, the music critic Max Graf would reflect that “Schreker’s music is in affinity with the art of Gustav Klimt. It possesses the same coloured lustre”;²⁸⁷ and in 1910, Richard Specht, one of Schreker’s pupils would remark that Schreker had “a Klimtian temperament”.²⁸⁸

Two short analytical essays from a more recent source, the 1984 volume of *Miscellanea Musicologica* (entitled ‘Art Nouveau and Jugendstil and the Music of the 20th Century’), attempt to address the connection between fin-de-siècle Viennese music and art using the idea of Figure and Ground in painting as fundamentally equal to theme and accompaniment, to *line* and *plane*. Horst Weber’s essay, *Figur und Grund—secessionistic instrumentation of Alexander Zemlinsky*,²⁸⁹ is problematic in its discussion of Zemlinsky’s Act II prelude from the ballet *Der Triumph der Zeit* (1901). Weber concludes that “as in Klimt’s pictures [...] in Zemlinsky’s [prelude] the relationship between *Figur und Grund* has changed in favour of ornamental elements[. In] this sense we call, provocatively of course, Zemlinsky’s instrumentation ‘secessionistic’.”²⁹⁰ The extract in question is built around accompaniment patterns like the ones found in Weber’s diagram:



Figure 2.3 — Zemlinsky, *Der Triumph der Zeit*, Act II interlude, b.4²⁹¹

Weber talks of the ‘resultant’ figuration (see the upper line of figure 2.3), by which he means the descending scale not found in any singular part, but audibly present in the global sound. Weber’s view is that this emergent scalic idea competes with the true ‘*Figur*’ of the music — the brass theme that enters in the next bar:

²⁸⁶ Korngold quoted in Wickes (1984, 204-5) from *Deutsches Opernschaffen der Gegenwart. Kritische Aufsätze*.

²⁸⁷ Quoted in Wickes (1984, 204).

²⁸⁸ “eine Klimt-Natur”. Quoted in *Ibid.*, 204, from *Die Musik*, Jan 1910.

²⁸⁹ Weber (1984).

²⁹⁰ *Ibid.*, 185.

²⁹¹ *Ibid.*, 189.

[I]nstrumentation serves to distinguish between *Figur und Grund* [...] understood *grosso modo* as the difference between theme and accompaniment. But this difference in the section of Zemlinsky's composition we have just analyzed, loses its clarity, or better, its importance, because the *Grund* itself is also figured.²⁹²

Had the 'resultant' idea of figure 2.3 been another melody, Weber's observations might have some validity, but the resultant material is in fact only a scalic motif that repeats itself without development²⁹³ — and thus to say that the *Grund* is 'figured', in this context, is perhaps overworking the evidence. Weber writes that the simple arpeggiations that make up the orchestral accompaniment "have an ornamental character":

this statement proves to be true by the relationship of the figurations to the bar and to harmony. Firstly, the form of the figuration fits into the bar so that it is easy to multiply it. Secondly, to achieve multiplicity it is constructed in such a way that it can remain invariant as long as possible. These two conditions designate it as a pattern[:] this pattern respecting the frame of the bar and avoiding chromaticism refers not to [a] floral ornament but rather to a geometrical one [...] a decorative element as we see it in cloth or wallpapers [...] objects that are connected with applied arts[, the] domain of *Jugendstil*.²⁹⁴

The problem with Weber's definition of the geometric 'Jugendstil' ornament is precisely in the fact that it has such an easy relationship, neatly fitting into each bar. Such musical figuration might easily be found in the music of Mozart or Schubert, to name but two composers for which it would be difficult to seriously attach a 'Jugendstil' label. Looking at the ornamentation of Klimt we see that the key to ornamentation of this period is not *identical* copying of shapes used, but rather a dynamic relationship. For example, in Klimt's portrait (figure 2.2) one area is decorated with circles, but circles of subtly differing dimensions and shades — this is not the unproblematic ornamental repetition Weber defines, and finds, in the accompaniment of Zemlinsky's prelude.

Less problematically, Lewis Wickes's essay provides 'A Jugendstil Consideration' of the prelude to Schreker's *Die Gezeichneten*:

The opening of the *Vorspiel* reveals in its layout [a] design appearing almost typical for that of [a] *Sezessionstil* [or more accurately, 'Klimtian'] painting — [featuring] a central figure, represented with broadly swinging or whip-like curvatures, set against an ornamental mosaic-styled backdrop or background plane of (virtually) abstract colour-patchwork. A sounding layer or plane of minute glittering pieces (two bitonally-arranged broken chords) serve as a

²⁹² Ibid., 183.

²⁹³ A more appropriate example might be found in the opening of the first of Berg's *Altenberg Lieder*, op. 4.

²⁹⁴ Weber (1984, 183).

framing textured backdrop against which is projected a theme of conspicuously broad [...] contour, in full and dark coloured tone (violas, celli and bass-clarinet) [this] may be compared to 'line' and 'plane' as in [art] (although the theme extends beyond the confines of mere 'line' [to] be seen as the 'principal focal point' or *Figur*) [as specified by] Schreker in a note to the conductor[:] "The accompaniment is only to be registered as unclear and blurred, humming, whirring and glittering", whereas "the melody [...] must come exceedingly fully to the fore".²⁹⁵

The key difference between this description of the 'ornamental' background and the one Weber describes is that the ornamental aspect is in some sense indefinable. Unlike the Zemlinsky passage—where each accompaniment motif neatly corresponded to the other, creating a greater effect from the sum of its parts—the elements of the Schrekerian *Grund* work both with and against each other. The harmonic dissonances created by the bitonality of D and B^b-minor are softened as the close dissonances are given further *physical* space across the orchestra. The individual instrumental elements do not form a greater unity, in the sense of a 'resultant' scale or melody, but rather instruments rise and fall from the focus of perception — each of the oscillations from D to B^b-minor takes place on a different instrumental level, at different rhythmic speeds, giving it the glittering-dynamic quality Wickes, and Schreker describes. As light reflects unpredictably from different aspects of Klimt's golden backdrops according to movement of the viewer, a similar effect occurs in perception of the stationary listener to Schreker's piece — now with the dynamic element transferred from the spectator to the various instruments of the orchestra.

The reluctant fusion, mentioned above, of the three- and two-dimensional elements found in the *Figur* and *Grund* of Klimt's portraits, are also addressed by Wickes:

[We find in] the opening of the *Vorspiel* [the] fusion between figure and background, so important in *Jugendstil* art[. The] broken-chord bitonal [accompaniment] is changed continuously in accordance with the specific movement of the underlying melodic line, not, however according to any normal functional-harmonic principle[. The] absence here of a functional melody-supporting harmonic basis [...] may be equated with lack of shadow or third dimension in the visual arts.

The mixed harmonies change according to the melodic structure, but are not functionally related in the traditional sense. Wickes's view is that this removes the third dimension, bringing *Figur* and *Grund* closer. However, the abnormal tonal relations surely serve to heighten the sense of difference

²⁹⁵ From 'A Jugendstil Consideration of the Opening and Closing Sections of the Vorspiel to Schreker's Opera *Die Gezeichneten*' (Wickes 1984, 206). First addition in square brackets is my own.

between melody and accompaniment, and thus increase the sense of separation, not reduce it. However, like the unusual contrast of perspective in Klimt's portraits between the human elements and the other two-dimensional parts (clothes and traditional background), Schreker's music does play with traditional relation of *Figur* and *Grund*, just not in the way Wickes suggests. Whilst the non-functional shifts of harmony (contra-Wickes) serve to create distance between theme and accompaniment, two elements serve to blend: tonality-wise, the melodic pitches are taken from the bitonal harmonic base of D and B^b-minor, so whilst they fail to function in the traditional way, the melody inhabits the same pitch space; secondly, timbre-wise, whilst the instrumentation of *Figur* and *Grund* is different, *both* share the string family — the *Grund* using the violins' lower tessitura, and the *Figur* using the upper tessitura of the violas and celli. Klimt's painting presents the problem of perspective as a three-dimensional figure paradoxically *inhabiting* the two-dimensional clothes of the *Grund*; Schreker's music, as was suggested in the previous section, gives similar problematical relation to *Figur* and *Grund* by making the two ostensibly different elements inhabit similar tonal and timbral space, reducing the perceived auditory distance between them, and therefore flattening the sense of musical perspective.

Frisch's description, earlier, of Jugendstil as '*Flächenkunst*' finds its musical equivalent in Dahlhaus's *Klangflächen* — sound-sheets, or -planes. *Klangflächen*, according to Dahlhaus, are "outwardly static but inwardly in constant motion[. W]ithout their internal motion, the *Klangflächen* would not stand in dialectical contradiction to the temporal structure of the music but would merely sound dull and lifeless."²⁹⁶ Dahlhaus identifies the origins of such moments in nineteenth-century musical depiction of nature and landscape (the 'Forest murmurs' from Wagner's *Siegfried*, for example). These, Dahlhaus suggests, are moments that manage to evoke these subjects due to their exemption from teleological progression and developmental thematic-motivic manipulation in contrast to the music to which it juxtaposed, highlighting 'nature' as idyllic and as place of refuge. The 'internal' motion of such *Klangflächen* is not only created from the underlying instrumental arpeggiations and resultant rhythmic movement, but by the unresolved non-harmonic tones.²⁹⁷

²⁹⁶ Dahlhaus (1989, 307).

²⁹⁷ Ibid.

There are noticeable parallels with the Schrekerian *Klang*, but, in addition, Schreker develops the nineteenth-century model with the use of increased dissonance reduced by timbral means. Dahlhaus's description of *Klangflächen* as 'outwardly static' should not mislead us — it is precisely the contrast found between the active timbral surface contrasted with non-functional dissonance and lack of developing material that creates the illusion of overall negation of forward movement.

The comparison of Secessionstil as *Flächenkunst* and moments of Schrekerian *Klang* as *Klangfläche* provides an interesting moment of *Konvergenz* in that both attempt to reduce their dominant parameter — Secessionstil, as *Raumkunst*, reduces its spatial dimension; moments of Schrekerian *Klang*, as *Zeitkunst*, aim toward a reduction of their temporal dimension. Reduction of the dominant dimension causes a heightened awareness of what is usually secondary — in the work of Klimt it is the paradox created by the reduced space of the *Grund* in comparison to the natural perspective of the *Figur*, and the eye's continuously failed search (in *time*) for a true correlation; conversely, in the Schrekerian *Klang*, it is the paradox created by the reduced temporality of the musical *Grund* and its blending with the seemingly forward-moving melodic *Figur*, and, due to the music's reduced temporal dimension, a growing awareness of the music's spatial presentation—through its instrumentation—as point of interest.

Whilst it is dangerous to equate terminology and stylistic periods within art (as Frisch and Dahlhaus both warn), through the discussion of *Figur und Grund* in certain musical moments of Schreker, compared with certain painterly techniques of Klimt, useful points of *Konvergenz* have been discovered. Both artists sought to develop their medium by subverting the dominant parameter of their art, and drawing greater attention to the elements that had hereto been considered secondary, developing the potential for more subtle relations between the temporal and spatial elements.

2.1.4.2 — Timbre and (Melodic) Line

The primacy of line in early fin-de-siècle art was beginning to be questioned by artists such as Klimt. In music, it was instrumentation that played a decisive role in the fin-de-siècle drive to develop and, in some cases, undermine the traditional conceptions of chord and line in early twentieth-century Vienna. Standard convention dictated that a particular melodic line would be

assigned a single instrument, or timbre, with the implicit understanding that all notes played by the same instrument could be considered as part of the same melody, even if awkward melodic leaps were present. When considering the altered interaction of chord and line in early fin-de-siècle music, the theories of Viennese writer Ernst Kurth (1886-1946) provide a useful contemporary framework. Kurth's *Romantische Harmonik*, 1917, puts forward "two competing qualities of harmony: the 'sensuous' (*klangsinnlich*) and the 'energetic' (*energetische*)".²⁹⁸ *Klangsinnlich*, writes Lee A. Rothfarb, "connotes two harmonic traits [...] 'sensuousness' [and] 'materiality'".²⁹⁹ The 'sensuousness' aspect connotes the "delightful appeal" of full-sounding triads, whereas 'materiality' refers to their harmonic stability as "seamlessly fused interval collections", which, according to Kurth, "weigh" on the fundamental, and represent "resistance"³⁰⁰ to the flow of melodic forces, which "try to wedge apart chords at their intervallic seams".³⁰¹

Chords are a hindrance to the effect of [melodic] energies[. T]he artistic effect rests primarily on the intensity of this conflict between surging energies and material resistance, and its strength [i.e. of the conflict] is the first characteristic of artistic creativity and inner tension.³⁰²

Kurth advocates the "*abandonment of the principle 'punctum contra punctum'*", as the "*origin of contrapuntal composition lies not in the chord but in the line*". For Kurth, 'punctum contra punctum' not only "undermines the idea of linear unity, of a continuous melodic process, but simultaneously destroys the fundamental will of polyphonic-linear structure".³⁰³ According to Rothfarb, Kurth's theory examines various musical sonorities "in an effort to hear greater or lesser degrees of energetic tension",³⁰⁴ adopting terminology from the physical sciences:

Kinetic-linear forces energize the texture of polyphonic homophony. Potential energy measures the force of chords that momentarily arrests the motion of their variously directed notes[.] Just as a dam builds up potential energy in restraining the flow of water, so do certain sonorities build up potential energy in restraining the active flow of linear impulses [...] chords 'augment' their mass to resist energetic-melodic forces.³⁰⁵

²⁹⁸ Rothfarb (1988, 113).

²⁹⁹ Ibid.

³⁰⁰ Kurth, quoted in Ibid.

³⁰¹ All unattributed quotations in this paragraph: Rothfarb in Ibid.

³⁰² Kurth in Ibid.

³⁰³ Kurth (1991, 46). Italics in original. From *Grundlagen des linearen Kontrapunkt*, 1917.

³⁰⁴ Rothfarb (1988, 133).

³⁰⁵ Ibid., 133, 152.

For Kurth, the analysis of a particular moment's 'energetic tension' cannot be done in isolation from its musical surroundings. The linear melodic processes leading toward a certain chord affect its 'energetic-sensuous' levels. Whilst Kurth's writings fail to mention instrumentation in any specific context, it is clear that timbral factors should be viewed as having a fundamental part to play in Kurth's harmonic-melodic theory. One of timbre's primary functions is to distinguish one linear part from another, or conversely, its ability to facilitate blending. Developing Kurth's theories to include timbral factors might allow for the expansion of Kurth's 'seamlessly fused', *Klangsinlich* chords, to include non-harmonic (but timbrally blended) tones — this is precisely what happens in the mixed harmonies of the Schrekerian *Klang*, as well as the reduced 'energetische' levels of the melodic line, as melody and accompaniment blend.

As was stated at the outset of this section, the conventions of orchestration dictated that a single melodic line was delineated by a single timbre. The Viennese musical moderns had other ideas, however. For example, in Webern's arrangement of Bach's six-voice *Ricercar* from the Musical Offering (1935), we see a different approach. For "most arrangers," writes Robert Erickson, "it was taken for granted that [Bach's] subject would be performed in a single 'homogenous' tone color, such as an organ stop or a particular instrument[. T]imbre would be treated as invariant, and it would function as carrier of the melodic motion".³⁰⁶ However, Webern's arrangement splits the subject different instruments:



Figure 2.4 — Anton Webern, *Ricercar*, opening bars³⁰⁷

According to Erickson, the opening subject is "broken up [so that] its joints, its articulations, are thrown into relief",³⁰⁸ but whilst the melodic line does not flow as easily as if performed on a single

³⁰⁶ Erickson (1975, 13).

³⁰⁷ *Ibid.*, 14.

instrument, the fragments are still audibly related via the *similarity* of timbre — all are played by instruments of the brass family, and thus a connection remains, as demonstrated by the greater contrast felt in bar 9 with the entry of the flute and violin. Webern's concern, which he later outlined, was to highlight Bach's motivic working via timbral division of the subject — the fragmented construction is possible due to the stable tonal language of Bach's music, and the listener's assumed knowledge of the generic principles of the *ricercar*. For these reasons the timbral disruption of line fails to dominate or distract from the familiar underlying formal and harmonic principles, and instead serves *conspicuously* to elucidate the music's motivic construction via timbral means.

Webern's earlier *Five Pieces for Orchestra*, op. 10 (1911-13), shows a more radical conception of melodic organisation, using timbre. Without the formal and harmonic principles of Bach to rely on, it is harder to hear continuous melodic lines as the instrumentation rapidly changes. It seems clear from the precision of Webern's score that he requires very particular sounds — that the timbral contrasts are in no way arbitrary — and as Erickson remarks, Webern is “not only composing the contrasts between instrumental sound, he is composing the range of similarities as well”.³⁰⁹ Webern's rapid changes of timbre and the renouncement of easily audible tonal relations, gives each instrument a sense of independence not found in the Bach arrangement. Sense of musical line is broken, even when timbral similarities are present. Webern's disintegration of melodic line (and therefore the hierarchy of theme and accompaniment) leads to an associative mode of timbral listening. For example, the first of Webern's short pieces gives a clear sense of return to the opening, after the timbral and registral expansion of the middle bars (perhaps this is one of the *Klangfarben-*compositions Webern described to Schoenberg as a ‘ternary Lied-form’).³¹⁰ Both opening and closing moments, whilst in different *tonal* areas, make use of the timbral similarity of *pianissimo* muted trumpet and low flute, accompanied by harp harmonics and celesta, to give a sense of formal closure, without harmonic or melodic support.

³⁰⁸ Ibid.

³⁰⁹ Ibid., 13.

³¹⁰ Schoenberg's remarks in *Anton Webern: 'Klangfarbenmelodie' (1951)*: “I remember that Webern several times showed me compositions and insisted I should recognize them as ‘ternary Lied-forms’. When he tried to apply that to *Klangfarbenmelodien*, that was highly naive.”, see Schoenberg (1975, 485).

Sehr ruhig und zart (♩=ca 50)

Sehr ruhig und zart (♩=ca 50)

Figure 2.5 — Anton Webern, *Five Pieces for Orchestra*, Op.10, no.1, opening bars, UE 12416.

In the op. 10 pieces Webern's disintegration of musical line goes further than the later Bach arrangement. Often, Webern changes timbre after a single note without allowing anything that might resemble a 'motif' or a 'theme' to appear, in the linear-melodic sense (see figure 2.5). As such, timbre often becomes primary structural parameter through long- and short-range associations.

Schreker's approach to timbral construction never approached the Webernian extreme. In fact, his remark that he opposed 'all too clearly differentiated timbres' in music may have partly been a response to the timbral pointillism of the Second Viennese School. However, this is not to say that there is never any sense of soloistic use of instrument, or primacy of line, in Schreker's music, but

that rather Schreker's aim is frequently one of balance and *blend*, rather than Webern's desire for the plasticity of each instrument. The *Kammersymphonie* epitomises Schreker's approach, in which the distinction between chord and line is not always clear. Paul Bekker remarked that Schreker tended to treat his orchestra in a manner that created a "harmonic language [that] resulted from the intersection of freely flowing horizontal lines".³¹¹ This approach is clear throughout the *Kammersymphonie*: on virtually every page of the score one finds numerous individual lines simultaneously presented so that one *single* instrumental line rarely has claim to supremacy. Melody is passed from one instrument to another; however, the model differs from the Webernian one in its effect. In Webern's *Ricercar*, the construction of the opening bars gives a hermeneutic framework by which to view the rest of the piece: 'each timbral change is of motivic importance'. As a result, the instrumentation never feels linearly integrated, as the piece is designed to eschew such integration from the very beginning. In his *Five Pieces*, melodic line is so fragmented that structural importance is placed on timbral associations, rather than melodic motifs. In contrast, the hermeneutic framework offered by the opening bars of Schreker's *Kammersymphonie* suggests a certain equality of instrumentation—each contributing to the *Klangfläche* as a whole—and a predilection towards blending, towards 'only *one* instrument'. Webern's analytical instrumentation disrupts the sense of melodic line in the pursuit of the *Klangfarbenmelodie* ideals that sought to place increased structural-motivic importance upon timbre, whereas Schreker undermines the primacy of the single energetic line through the timbral blending of multiple layers so that the distinction between melody and accompaniment, *Figur* and *Grund*, is frequently ambiguous (as the discussion of the opening of the *Kammersymphonie* in chapter 1 suggested). Such ambiguity results in the foreshortening of musical perspective through the failure to establish distinct timbral strata, and also a reduction in the primacy of Kurth's 'energetic' line as the distinction, in the Schreker example, between horizontal melodic line and vertical '*klangsinnlich*' harmony is often timbrally blurred and heard as somewhat fluid.

Throughout this chapter, the underlying thread has been Adorno's assertion that timbre had a new-found function at the fin-de-siècle: that it was not just a decorative parameter, but that it could

³¹¹ Paul Bekker paraphrased in Hailey (1993, 96).

be used by composers to critique both inter- and intra-compositional norms, and, as a result, function as a constructive parameter in musical narrative. It is these narrative disjunctions that this thesis intends to analyze in greater detail, but also, as a result of the above discussion on timbre's *Konvergent* principles with visual art, its ability to create or collapse a sense of perspective and distance within the auditory scene. The final section of this chapter discusses a more recent theory in order to adapt and develop the analytical framework Adorno put forward, so that the timbral element of fin-de-siècle Viennese music can be analyzed using a modern hermeneutic framework, but one that is specifically grounded in the historical context, values, and debates of that time.

2.2.1 — Albert Bregman's 'Auditory Scene Analysis': *Konvergenz* between the Visual and Auditory

Albert Bregman's influential book *Auditory Scene Analysis* (1990) deconstructs the auditory scene, frequently discussing how the auditory and visual can be seen to 'converge' in function, putting forward an ecological framework for dealing with the central problem of auditory perception, namely

that audition, no less than vision, must solve very complex problems in the interpretation of the incoming sensory stimulation [when] dealing with mixtures of sounds. The sensory components that arise from distinct environmental events have to be segregated into separate perceptual representations.³¹²

These segregated perceptual representations he calls 'auditory streams' (distinct from 'sounds'), because "a physical happening [...] can incorporate more than one sound, just as a visual object can have more than one region".³¹³ For example, Bregman draws attention to a series of footsteps being perceived as a single event, even though each footstep is a separate sound (a phenomenon that he terms *sequential* integration). Also, Bregman mentions that separate streams might be integrated *simultaneously* (for example, the wind section of a symphony orchestra, despite their independent parts, can be heard as a single perceptual entity).³¹⁴ What is most useful with Bregman's terminology is its fluidity, in that both simultaneous and sequential integration can take place on a number of

³¹² Bregman (1990, 44).

³¹³ *Ibid.*, 10.

³¹⁴ *Ibid.*: sequential integration is discussed in considerable depth in Bregman's second chapter (49-211); simultaneous integration in his third (213-394).

levels from the macro- to the microscopic. Bregman's footstep example could be reconsidered on a closer level, which considered only a single footstep as sequentially integrated. This would require, in turn, a closer inspection of what acoustic events made this particular 'sequential stream' (for example the successive sounds of the foot hitting, maintaining contact with, and leaving the ground). On a macro level, this example could theoretically be expanded to include the sounds of the street where the walking was taking place, as a distinct sequential stream in comparison to, say, the neighbouring street. The same could be true of the simultaneous woodwind example. Here on a more micro level, specific combinations of the wind instruments could be considered as simultaneously integrated, distinct from the rest of the wind group.

Bregman's book discusses acoustic events in general, only specifically turning to a discussion of music in chapter 5. As a result, some caution must be taken when attempting to apply some of his theory. This highlights the inherent danger of attempting to apply acoustic theory—often produced in 'laboratory' conditions, and taking pure sine tones as their starting point—to a theory of timbral analysis of musical composition. Not that this is a new problem: Helmholtz's *On the Sensations of Tone as a Physiological Basis for the Theory of Music* (1862), when discussing the ability to apprehend differing timbres ('qualities of tone'), stated that

Before we can determine the function of the ear in apprehending qualities of tone, we must further inquire whether [the] relative strength of the upper partials suffices to give us the impression of a determinate musical quality of tone[.] Since we deal only with *musical tones*, that is with such as are produced by exactly periodic motions of the air, and exclude all irregular motions of the air which appear as noises, we can give this question a more definite form.³¹⁵

Helmholtz's discovery that quality of tone can be distinguished by its harmonic partials has remained influential, but in addition, it has since been suggested that the following characteristics are most important in timbral recognition — amongst which we see a number of *noise*-related parameters:³¹⁶

1. The quality of the attack — whether it is *impulsive* (i.e. struck or plucked), or *continuous* (i.e. by bowing or blowing air) — and its 'rise time' (the time it takes for a sound to reach maximum amplitude — impulsive attack, short rise time; continuous attack, longer rise time);

³¹⁵ Helmholtz (1885, 119).

³¹⁶ The following list is compiled from the following sources: Erickson (1975, 4-6); Campbell and Greated (1987, 159-160); Tsang (2000, 4-11), Bregman (1990, 647), and McAdams and Giordano (2009, 73).

2. The spectral envelope of the steady-state portion of the sound — Helmholtz’s discovery that “*differences in musical quality of tone depend... on the presence and strength of partial tones*”,³¹⁷ and its related ‘spectral centroid’, or ‘brightness’,³¹⁸
3. The rate of decay;
4. A tone’s graininess — where it lies on the range “between tonal and noiselike character”.³¹⁹

In addition, whilst the above properties are commonly held to be responsible for timbral differentiation in numerous experimental studies, Bregman, in his chapter on auditory organisation in *music*, puts forward the ecological position (following Cadiz and Grenoble) that

when we listen to a sound we are building a mental description not in terms of the qualities of the sounds that we are sensing but in terms of the physical properties of the source. Therefore when we hear a gong being struck, we do not mentally store the result in terms of the relative amplitude of different spectral components and how they change over time, but rather in terms of how hard the gong was struck. We build a model of the physical structure of the event, and [when] we detect changes, we experience these as changes in the physical cause of the sounds.³²⁰

Similarly, Bregman concludes that the reason that “we hear two sounds of a particular instrument as being the same in its different registers is by knowing that both sounds are *produced* by that instrument”.³²¹ The contrast between these last two comments—relating to timbre in *music*—and the list of timbral parameters above, exposes a tension in Bregman’s book: that the listener is not aware of these individual parameters, but rather takes a ‘top-down’ approach to listening (i.e. we hear ‘a car’, not its particular ‘spectral centroid’, ‘rise time’, or ‘graininess’), and that music is often built around learnt, rather than in-built, patterns of listening.

The majority of the book discusses our in-built, natural responses to the sound scenes of everyday life, suggesting that we do so through the use of ‘primitive’ processes of auditory grouping

³¹⁷ Helmholtz (1885, 127).

³¹⁸ “Brightness is, roughly speaking, the mean frequency that is obtained when all frequency components of a sound are weighted according to their loudness. Bright tones have more of their energy concentrated in higher frequencies than dull ones do.”, from Bregman (1990, 646). The scientific terminology for this is ‘spectral centroid’: “representing the relative weights of high and low frequencies and corresponding to timbral brightness: an oboe has a higher spectral centroid than a French horn”, from McAdams and Giordano (2009, 73).

³¹⁹ Erickson (1975, 5).

³²⁰ Bregman (1990, 484).

³²¹ *Ibid.*, 486, my emphasis.

(essentially passive), and by “governing the listening process”³²² using ‘schemas’, which incorporate *knowledge* of familiar sounds and patterns when forming streams. Throughout, Bregman concentrates mainly on the primitive mode, but importantly discusses the difference:

Primitive segregation involves neither past learning, nor voluntary action [whereas] the schemas in schema-based organization have been developed for particular classes of sounds[.] Anything that is being ‘listened for’ is part of a schema.³²³

Attention involves “a subjective experience of effort”, but “the number of things that can be attended to at the same time is quite limited”³²⁴ — primitive listening processes *partition* the sensory evidence, but, rather than partitioning, schema-based listening *selects* from the evidence.³²⁵ This means that “the effects of primitive segregation are symmetrical” (i.e. that we can listen to any of the streams with equal ease), whereas “schema-based selection[s] do not show this symmetry.”³²⁶

It is clear, when considering music, that both primitive and schema-based listening play a vital part, but that the role of schemas dominates — how else could certain timbral configurations be seen to contradict compositional norms, or disparate timbres (the lowest tessitura of the double bass, and high tessitura of the violin) be heard to be part of the same ‘family’? Bregman writes that

Music must defeat the stream-segregation tendencies (or at least work with them) to achieve its goals. [Listeners] must perceive those organizations that are part of the architecture of the music itself rather than perceiving the individual pieces of hardware that are employed[.] They must hear fictional sources of sounds that have qualities that emerge from the set of sounds being grouped.

Fusion and segregation must therefore be carefully controlled in music.³²⁷

The notion of a ‘fictional’ sound source is an interesting one—with particularly Adornian overtones—drawing attention to the fact that often, in an orchestral context, what we hear are blended groups of instruments, each of which we comprehend as a single entity, or hyper-instrument. For an example of our schema-based perceptions counteracting the primitive, we need only examine in more detail the idea of the orchestral ‘family’. From an early age, many school

³²² Ibid., 641.

³²³ Ibid., 667.

³²⁴ Ibid.: David Huron, for example, states that “If a composer intends to write music in which independent parts are easily distinguished, then the number of concurrent voices or parts ought to be kept to three or fewer”. See Table 3.9 in Tsang (2000). However, this value is likely to depend on the degree of timbral differentiation.

³²⁵ Bregman (1990, 667).

³²⁶ Ibid., 669.

³²⁷ Ibid., 674.

children are taught to identify the instruments of the orchestra, and to categorise them into the relevant families. However, various research has indicated that these familial groupings are not completely innate. John Grey subjected instrumental sounds to computer analysis (based on a similar list of timbral characteristics to the one defined above). Whilst there was considerable overlap with the traditional familial groupings, one diverse grouping contained the bassoon, French horn, cello, trumpet, and flute.³²⁸ Another similar experiment cited further interesting groupings, such as violin-oboe and viola-cello-flute.³²⁹ Despite these unexpected results (unexpected, at least, when compared to learnt schema), a number of the other groupings showed similarities to the traditional families, but as Lee Tsang suggests, the variety of overlaps between these instrumental families should cause us to consider a more flexible approach to grouping: considering similarity of sound, rather than instrumental families as the main criteria.³³⁰ Both passive and schema-based elements are required to form a complete musical scene analysis — their interactions (both in alliance and in opposition of each other) will prove to be an interesting topic for analysis, and it is the sort of interaction that started to surface in the brief examination of Schoenberg's *Erwartung* chord in the previous chapter.

Earlier, I referred to certain critics' aversion to the notion of 'passive' (implying 'uneducated') listening. And whilst I do not wish to perpetuate such elitist attitudes, it is, however, one of the main aims of any analysis to expose how music deviates from, or conforms to, learnt norms or 'schemas'. In addition, it is precisely the use of these fin-de-siècle norms and learnt schemas that allows my analyses to be contextually grounded in fin-de-siècle attitudes whilst also using current theoretical writings to clarify which elements of the auditory musical soundscape were not part of these cultural schemas, but instead engender a response based on 'primitive' ecological principles (such as music's spatial qualities).

³²⁸ Details of Grey's experiment can be found in Pierce (1992, 196-9). Whilst the instrument sounds were synthesised, the sounds used were "difficult of impossible to distinguish from sounds produced by the instruments they imitated" (197).

³²⁹ Experiment by Dubnov et al. (1995) cited in Tsang (2000, 8-9).

³³⁰ Tsang (2000, 9).

2.2.2 — Perspective, Space, and Distance: (Partial) Masking

On top of the obvious spatial cues in the musical auditory scene (the various physical locations of the instruments), Bregman discusses ways in which such straightforward signals might become confused. One way is through the ‘masking’ of sounds:

A sound is deemed masked if there is no way to tell whether it is present or absent in a mixture of sounds.³³¹

One sound is said to be *masked* by a second if the first is audible in the absence of the second, but inaudible when the second is present.³³²

These situations refer to moments when the ‘masked threshold’ of the concealed sound has been passed. However, there is a transitional stage, according to Campbell and Greated:

The problem [of balance] is more serious than at first sight appears. [In the opening four-part chorale of Tchaikovsky’s *Romeo and Juliet Fantasy-Overture*,] if the second bassoon were to make a crescendo in the third bar [it] would become too prominent, and the effect of homogenous chords would be lost. [The listener] would also hear the other three instruments becoming quieter. Indeed, if the second bassoon had a brainstorm and played *ff*, the other three instruments would be almost completely inaudible.³³³

An instrument’s apparent loudness is therefore dependent on the loudness of the other instruments playing. Masking’s effect on the musical scene is one of full or partial concealment, creating timbral layers, and the implication of perspective as a result. The opening of Mahler’s *First Symphony*, mentioned earlier, where the strings partially mask the rest of the orchestral sound, demonstrates this principle clearly.

Much of Bregman’s thought openly takes its basis from the *Gestalt* movement of the early twentieth century, most notably in the notion that items in proximity, and items that are similar, should be grouped into streams.³³⁴ Bregman suggests that these particular illusions—generated by subconscious cognitive processing—could be fruitfully applied to an analysis of timbre through a *Konvergenz* of principles between the visual and the auditory.

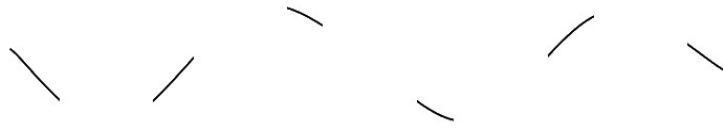
³³¹ Bregman (1990, 660).

³³² Zwislocki in Campbell and Greated (1987, 121).

³³³ *Ibid.*, 121.

³³⁴ See Bregman (1990, 18-21).

A — lines appear disconnected



B — addition of blocks creates illusion of connection

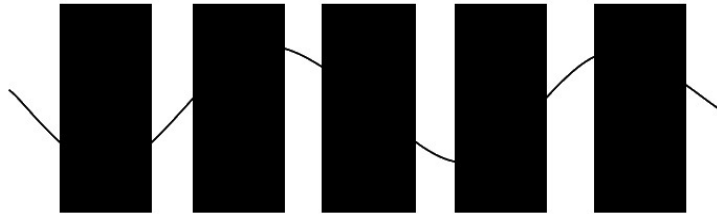


Figure 2.6 — A Visual Form of the ‘Continuity Illusion’

As the above diagram makes clear, before our perceptual systems are willing to make connections with the various lines in figure 2.6a, they must be presented with information that suggests something is actually missing. This happens by way of masking objects—in this case, five black oblongs. However, the difference between this situation, and the masking described previously, is that this masking is *illusory* — there are no lines behind these objects, but as a result of the masking principle the brain *assumes* that they exist. Bregman transfers this to the auditory realm, where a soft and loud sound alternate, and finds that the softer sound is perceived to continue through the louder one:

The scene analysis explanation is that the auditory system has taken part of the sensory evidence contributed by the louder sound and assigned it to the percept that represents the softer sound [...] since the louder sound would have masked the softer one even if it had been there.³³⁵

For this illusion to occur, Bregman outlines the following four principles (where B equals the louder masking sound, and A1 and A2 represent the softer sound before and after, respectively):

1. There should be no evidence that B is actually covering up a silence between A1 and A2;
2. B should be sufficiently louder than A to provide adequate stimulation in the neural frequency channels normally stimulated by A;
3. There should be evidence that A1 and A2 have actually come from the same source;
4. The transition from A to B should not be interpretable as sound A transforming into a new form, B (i.e. it should be sudden).³³⁶

³³⁵ Bregman (1990, 662).

³³⁶ Taken from Ibid., 663.

The line in figure 2.6, could easily represent a solo melodic contour, and the blocks a full orchestral *tutti*. Provided Bregman's rules are adhered to, the illusion would be perceived. This model would encourage a way of listening which, again, creates a perceived sense of depth in its timbral construction — that the solo melody could be heard to continue on a plane of sound different from its orchestral interruption, 'covered' by the blocks of sound. In figure 2.6, it is ambiguous as to whether the line goes in front or behind the masking blocks. If each was a different colour however, the effect would be one of the line passing behind the blocks.

The continuity illusion can be extended further, I believe, in that it need not merely apply to solo lines being masked, but more generally to softer timbral configurations, masked by sufficiently contrasting ones. Also, it might be applied not just to brief musical moments, but, on a larger scale, applied to discussions of musical form. On a smaller scale, Bregman argues that this is a passive response. In the context of a large-scale musical structure, however, one could extend this idea so that a musical passage with a distinct musical timbre produces the illusion that—on its return *much later* in the piece—it had been continuing, in the 'background' (for want of a better term).

The preference for the 'distant' construction of certain musical moments has its origins in Romantic aesthetics. Novalis wrote that

In the distance...*Actio in distans*...Distant mountains, distant people, distant events, etc.,
everything becomes romantic.³³⁷

The idea of spatial distance, I would suggest, was heavily present in the listening attitudes at the *fin-de-siècle*. Ever since it has become the custom to dim auditorium lights at concert performances, not only has this encouraged an attitude of focussed listening, but also a sense of aesthetic *distance* between audience member and performance space—the black void in-between acting as a distancing tool. The finely constructed—'*phantasmagoric*'—timbres of much *fin-de-siècle* concert music are perhaps best heard from this 'distant' perspective. If this distance were removed, and the listener instead placed in the centre of the orchestra, much more of the *detail* of the score would be audible, but what would be audible would be the work's constituent parts, and the impression received would be similar to a chef surrounded by the ingredients of a cake, rather than standing back to view the

³³⁷ Quoted in (Hoeckner 1997, 55).

finished product. Distance blurs and blends spatial cues, making distinct auditory streams harder to disentangle.

Anselm Wagner's recent chapter on the use of distance in Klimt's paintings focuses on his use of the telescope to paint distant landscape objects.³³⁸ As an example, he gives Klimt's *Church at Unterach on the Attersee* (1916), where we are given a close up view of a village by a lake, but the sense of perspective is condensed as all the buildings (which stand behind and in front of one another) occupy the same visual plane. Distant objects tend to appear as if on a single optical plane, and Klimt's use of the telescope in this instance serves to give a close up view of this distant scene, an effect partially achieved through the use of very similar textures throughout the painting. It is also a reason, Wagner argues, why many of Klimt's similarly constructed paintings, with their flattened perspective through almost identical textures spread across the visual scene, simultaneously give the impression of closeness and distance.³³⁹

With this in mind, and with Adorno and Bregman's convergence of the auditory-visual, one can interpret the opening bars of Schreker's *Kammersymphonie* as a distant sound, *par excellence*. Its lack of distinct timbral strata due to the auditory similarity of each individual component, the rhythmic vagueness of each part, and the reduced dynamic levels all encourage blending to a single auditory plane. The return of this *Klangfläche* at a number of points throughout the piece—compared with the rest of the music, which generally contains more clearly differentiated timbral strata and increased dynamics—encourages an ecological interpretation that this particular sound constellation is more distant, giving the illusion of continuity throughout the piece, as if it had been masked by the 'closer' sounds. From this 'angle', Schreker's piece could be seen to provide much of its interest through the contrasting play of perspective and distance, especially when compared with the clear timbral strata, and rhythmic profiles, of its central scherzo section.

³³⁸ *Klimt's Landscapes and the Telescope* (Wagner 2006)

³³⁹ *Ibid.*, 169-70.

2.2.9— Eric Clarke’s *Ways of Listening: an ecological approach to the perception of musical meaning*

Eric F. Clarke’s book-length study on ecological approaches to perception of musical meaning³⁴⁰ builds on Bregman’s ASA principles. Whilst Bregman, too, takes an ecological approach, Clarke updates these ideas to include important recent developments in musicology—most noticeably with ideas of musical agency, motion, space, and subject-position. Clarke starts with a detailed outline of the development of ecological theory in music, contrasting it from the “information-processing” cognitive model:

The ecological approach to perception offers an alternative view that gives a coherent account of the directness of listeners’ perceptual responses to a variety of environmental attributes, ranging from the spatial location and physical source of musical sounds, to their structural function and cultural and ideological value.³⁴¹

The ecological view is not a ‘bottom-to-top’ aesthetic approach, attempting to “make sense” and impose a sense of structure on a highly complex world. Rather, the ecological approach “emphasizes the structure of the environment itself and regards perception as the pick-up of that already structured information”.³⁴² This is not a “quasi-mystical” process, but rather stems from the passive learning through continual exposure to our environment.³⁴³ Perception is “not a process of taking in ‘raw sensations’ and then interpreting them”, instead it “emphasizes the critical importance of information as information *for* something”.³⁴⁴ This is helpful for timbral analysis, for it means we can legitimately move away from the ‘raw’ acoustic data, and toward perceptual meaning. Also, such “interdependence between perception and action” suggests “that every perceptual experience will bear the trace of an action component”,³⁴⁵ giving ecological evidence for the ideas of musical agency, and motion. As Clarke notes, the

sounds of music can and obviously do specify objects and events in the world (instruments and the people who play them), and kinds of action (bowing, blowing, plucking, striking), even

³⁴⁰ Clarke (2005).

³⁴¹ *Ibid.*, 46.

³⁴² *Ibid.*, 12, 17.

³⁴³ *Ibid.*, 25.

³⁴⁴ *Ibid.*, 32.

³⁴⁵ *Ibid.*, 62.

when the precise nature of those actions is unclear or uncertain (a person may hear striking without knowing exactly what has been struck).³⁴⁶

This is similar to Bregman's perspective, and in this regard Clarke suggests it would be fruitful to consider the "way in which musical sounds may specify the objects and events of a *virtual* environment".³⁴⁷ Clarke gives the example of a picture which, whilst flat, conveys three dimensions, and can "fascinate their viewers by defying or playing with the normal rules of space" and suggests that the "same principle applies to hearing: sounds can specify a virtual domain that both abides by, and stretches or defies, the normal laws of physics".³⁴⁸ In this last example, Clarke describes the potential interplay of the spatial and the auditory elements in music. Such interplay, and the potential to distort or deviate from standard spatial-auditory expectations (which Clarke calls 'the normal laws of physics'), links back to both Bregman's theories on auditory scene analysis and Adorno's arguments for the analytical usefulness of convergence between the visual-spatial and the auditory.

This chapter has examined how the visual and auditory were strongly perceived to intertwine by many fin-de-siècle commentators, but that it was particularly timbre's agency as a parameter that facilitated such discussion. Through the perceived convergence of the auditory and visual-spatial parameters, Adorno was able outline his three analytical categories (phantasmagoria, suspension, and breakthrough), all of which put timbre, and elements of the spatial, at the centre of the way that each category functions. The inclusion of more recent theorists, such as Clarke and Bregman, is not intended to suggest the possibility of a neat mapping from a fin-de-siècle historical viewpoint onto a modern understanding of auditory perception, one that has been informed by a century of empirical research. Instead, Bregman and Clarke's theories provide a comparative angle with which to interpret fin-de-siècle ideas, responses, and theories, whilst still being contingent upon the historical themes and questions that this thesis has already put forward.

For example, Adorno's main hermeneutic standpoint with his three analytical categories is one of disjunction between contextually-conditioned expectations of timbral-spatial norms and that which is actually found in the music he examines. It is through these disjunctions that music

³⁴⁶ Ibid., 69.

³⁴⁷ Ibid.

³⁴⁸ Ibid., 70.

encourages certain subject-position(s) in the listener. Clarke gives an example when he considers the crescendos on a single pitch (B) that occur in the third act of Berg's *Wozzeck*, noting the paradox between the sense of stasis due to the complete absence of pitch change, contrasted with the continuous change in timbre (in the first) and dynamics (in both).³⁴⁹ From personal experience, these colour crescendos—particularly the second—elicit a certain sense of overwhelming tension (even though I have heard these moments on numerous occasions). Clarke offers an ecological perspective that would serve to explain such an emotional response, based on the way in which the sound specifies a sense of 'collision' with an auditory object. He argues that the effect of the unified timbre of the second crescendo is more forceful due to its focussed sound; in its unified sense of direction. Also interesting is the difference in end-point of each crescendo: as Clarke notes, the first ends with a six-note orchestral chord coinciding with the bass drum, having "the attack and unanimity of a physical impact [...] approach followed by collision".³⁵⁰ The second, solely dynamic, crescendo ends

not with a downbeat—indeed without any final 'event' at all—but with the equivalent of a cinematic cut straight into the next scene[.] It is as if the imminent collision never materializes, and the listener (or the music?) is shot out into a new and completely unexpected space.³⁵¹

Clarke's explanation of the movement and collision is convincing — we expect a 'collision' of even greater intensity, given the increase effectiveness of the second crescendo. Another, less satisfying, ecological explanation might reside in the potentially *physical* danger of damaging one's hearing — with the second crescendo providing a formidable number of decibels from the full symphony orchestra, especially with the inclusion of the percussion. However, Clarke's ecological approach to timbre in Berg does raise a number of important and useful points concerning musical perspective, distance and spatiality, namely, by asking where the movement takes place, and how one might judge this more precisely from the ecological timbral hints provided.

³⁴⁹ The discussion, with score extracts, can be found in *Ibid.*, 76-80.

³⁵⁰ *Ibid.*, 80.

³⁵¹ *Ibid.*

2.2.10 — Some Preliminary Conclusions & a Final Timbral Analysis of Schreker's *Kammersymphonie*:

Timbre is a difficult parameter to define and analyze: a number of recent timbral analyses seem to be mere redrawings of the score, replacing each instrument's musical staff with a patterned block that contrasts with those around it.³⁵² This type of analysis seems somewhat redundant: firstly, it rarely provides more information than an overview of the score itself; secondly, it removes the melodic, harmonic, dynamic, and rhythmic aspect of each instrument — which, as this chapter has shown, can play a vital role in how these instruments interact within the auditory scene as a whole; and thirdly, it often places each instrument on an equal footing, when this is rarely the case, with the potential for certain instruments to not even be audible. Another common attitude to timbral analysis seems to be to 'analyze' whether a composer 'smoothes the joins' between instrumental phrases by dovetailing instrumental entrances and exits.³⁵³

This chapter highlights an alternative analytical strategy, founded on the fear/excitement that the fin-de-siècle Viennese felt regarding timbre's 'new-found' power to interact with the music's traditional parameters. Adorno's analytical categories described timbre's potential effect, but were often bound up with stigmatic associations and the assumption that timbre had a negative power to delude and deceive through its enchanting powers. Through the ideas of Saler and Daub it was seen that this approach was patronizing toward Viennese audiences: many of Schreker's 'phantasmagorias', for example, require the listener not to be deluded, but to be *aware* that they are being 'deluded' for the full dramatic-narrative effect to be realised. Timbre had, by this point in history, begun to establish a wide range of culturally understood (or at least, recognisable) associations within an ever-broadening orchestral palette. Though timbre's status and position within the hierarchy of musical parameters was continually challenged in fin-de-siècle Vienna, there was no question that, as those timbral tropes became more widely used and developed, they were able to begin to effect musical narrative and subject position in much the same way as traditional parameters did through tension and release, dissonance, or inter-/intra-compositional reference.

³⁵² See, for example, Steetle (2007); Parks (1999, 68-70); and the less-recent Erickson (1975, 40).

³⁵³ See, again, Parks (1999), and a large part of Sheinbaum (2002, 106-76).

Throughout this entire discussion, two key threads have emerged: firstly, through the broader set of principles that Adorno began to outline in his discussion of breakthrough and phantasmagoria, and through his detailed deconstruction of the potential convergence between the visual and the auditory, a theoretical framework has been developed (with the assistance of authors such as Bregman and Clarke) that allows timbre to signify changes in musical perspective, distance, and spatial construction, and which, in turn, can serve to alter the subject-position of the listener. This hermeneutic framework, emerging from fin-de-siècle anxieties over the quality of certain timbral configurations, will continue to serve as the grounding for the analytical observations in the following chapters.

Secondly, timbre (when it is perceived to be subverting culturally-conditioned inter- and intra-compositional conventions) potentially allows for the ‘critique’ of a straightforward interpretation of a piece’s musical narrative if, within the moment being analysed, it appears to be working in conflict with the music’s primary parameters. The earlier analysis of the opening of Webern’s *Ricercar* arrangement provided a key example of this as it gives a clear illustration of how timbre can work with and against a primary parameter. In that particular example, compositional convention would suggest that the culturally-conditioned ‘inter-compositional’ expectation would be to present the opening subject as a single melodic line in a single voice or timbre. Instead, Webern’s use of *klangfarbenmelodie* deviated from this inter-compositional norm and advanced a melodic line whose harmonic and melodic construction remained unaltered, but whose timbrally fragmented construction breaks up the longer sense of horizontal line in order to highlight the smaller motivic elements within that melody. It is Webern’s deviation from inter-compositional expectation that immediately set the stage for this piece to be a work ‘about’ timbre. The original narrative of Bach’s piece, which sought to introduce its theme and develop to a climax through systematic use of harmony and increasingly more complex counterpoint, is now subverted (or perhaps one could argue that it is *augmented*) so that the focus is more clearly placed to emphasize the motivic microstructure within Bach’s music. In this sense, it is important to also stress that the timbrally-defined narrative of this piece is strongly tied to the time and place of its construction: this was written at a point (1935) where *Klangfarbenmelodie* was a relatively old idea and as a result it seems quite restrained and measured when compared to other works written in the same tradition. I would suggest this is not

simply because the harmonic vocabulary is much more straightforward than Webern would have written, but because the phrasing of the changes of timbre are quite measured and relatively regular. Though there is much contrast within Webern's orchestration, I would argue that there is little *intra-compositional* timbral conflict as the fragmentary nature and steady pace of timbral change is set up as the norm from the outset. As a result, timbral change gives little sense of climax and intensification that wasn't already present in the original (other than the more obvious textural increases, e.g. the full orchestral tutti that ends the piece) and one could imagine, for example, a reworked version where *intra-compositional* timbral conflict could be given a more prominent role and add to this sense of intensification by simply changing more frequently (or through more extreme uses of timbre) as the piece progressed. By focussing on timbre's role in moments like this — where *inter-compositional* deviation and *intra-compositional* conflict collide — it is possible to find moments of narrative ambiguity and disjunction where traditional methods of pitch- and rhythm-centric analysis would have been unable to do so.

These two threads move this thesis clearly away from an impossible attempt to define an overarching 'grand method' of timbral analysis, and instead provide a framework with which to analyse individual moments within works from a culturally-grounded standpoint. The section at the end of the previous chapter focussed on contemporary reaction and examined the potential reasons for the crisis of response. In the analysis that follows those viewpoints are used to give my remarks a strong historically-contextualised grounding by helping to define the *inter-* and *intra-compositional* norms and expectations at the time of its reception. These are the learnt 'schemas' that Bregman refers to in his analysis of the auditory scene. Of course, before I begin, it is worth reasserting that any attempt to analyse a piece from the perspective of an 'imagined other' is a futile and impossible task and that this is not my aim here. In any project where retrospective analysis and theorisation of a particular historical viewpoint play an important part an analyst is always also writing partly from their own position. Even a Neo-Riemannian or Schenkerian analysis is written from the perspective of a modern analyst, even though they are using historically-grounded tools to do so. From this basis, the aim here is to use these historically-contextualised responses and attitudes to ground my choices of elements to analyse and to determine, as far as possible, the hermeneutic approach I will adopt to facilitate discussion of this particular repertoire. As I begin to use modern toolsets to analyse

particular case studies, it is important to state that it is often not a neat mapping from a perceived historical viewpoint to modern analytical techniques: to a certain extent my thesis aims to answer a historical question, but at the same time I do not want to be bound to a narrow sense of composer intention/listener response that a historical positivist approach might advocate. It is not my intention to create a ‘universal theory’ of how timbre ‘worked’, was used, or was responded to in this period of musical history; theory *supports* rather than drives the project. It is more about the facilitation and hermeneutic interpretation of individual case studies with timbre as their focus.

With these caveats in mind, let us return to our Schreker case study from Chapter 1, the opening of the *Kammersymphonie*. As we saw, the timbral expectations for a *chamber* symphony — the inter-compositional norms, or learnt schemas — were self-evident: 1) there should be a greater sense of soloistic treatment of individual instruments; and 2) direct comparison of the responses to the Schoenberg and Schreker works suggested that a chamber symphony should be more ‘ascetic’ in its use of instrumentation — instrumentation should clarify, not conceal thematic material.

What is timbrally interesting in the Schreker example, therefore, is that it breaks from these inter-compositional expectations right from the outset with its ‘Schrekerian sound’ and this is clearly one of the reasons this piece has had a mixed reception history. In addition, it is this opening sonority that provides that greatest level of *intra*-compositional conflict or disjunction. Its distinct mix of static, suspended harmony whose stability is disrupted by the particularly complex timbral configuration is unique within the piece and clearly noticeable each time it occurs. Here we hear elements of Adornian suspension, phantasmagoria and breakthrough: suspension through its static harmony and emphasis instead on tone colour, and phantasmagoria through the concealment of the origins of the individual elements of the combined sound through subtle blending. Breakthrough requires slightly more explanation in this context for — in Adorno’s Mahler examples — it seems to always require a moment of timbral disjunction with a *loud* dynamic, which here is clearly not the case.

In Schreker’s piece, I would argue that a modified conception of Adorno’s breakthrough is appropriate when referring to the moments during the piece where this opening sonority returns. There are three points to make in this regard: 1) there is still a clear sense of unprepared timbral disjunction each time the opening idea returns; 2) there is often a sense of conflicting spatial

construction. For example, in the earlier Mahler examples the moments of breakthrough ‘collapsed the illusion of distance set up by previous timbral configurations’. In the Schreker example this opening sonority, through the continuous fluctuation in the way the different timbral layers mask and unmask one another, *creates* a sense of uncertain musical perspective or spatiality that is not present in much of the rest of the piece. This uncertain spatiality is particularly absent just before each recurrence of this opening timbral configuration (bb. 119, 511, 518) where there is a clear timbral foreground and background. The moments where this opening sonority returns, then, contrast with the more conventional sense of musical spatiality found in the majority of the rest of the piece through a more normative use of counterpoint, texture and timbre; 3) finally, these moments could also be considered as breakthrough in the sense that a contemporary listener may have been ‘unprepared’ for it, given the inter-compositional expectations of this genre at that time and place. As has been noted, for Adorno, this unpreparedness is a key positive attribute of his breakthrough category: it allows the music to critique the idea of a standard, uncomplicated formal paradigm. From the start, this recurring sonority is set out as a deviation from both intra- and inter-compositional ‘norms’. The words Adorno used to describe Mahler’s first symphony — that it ‘presupposes the official idea of good instrumentation in order to reject it’ — are equally valid here.

Despite this, Adorno’s category of breakthrough does not fully give a sense of how Schreker’s sound functions. Though each recurrence is a potential ‘intrusion’ within the soundscape, it is not the forceful one which true breakthrough requires. Therefore, I suggest that we hear the opening theme of Schreker’s *Kammersymphonie* as a hybrid between the two categories Adorno regards positively: breakthrough and suspension. The qualities that give Schreker’s recurring idea the sense of stasis required for ‘suspension’ were mentioned earlier in the chapter (the sound’s focus on timbre, rather than more goal-orientated parameters such as harmony or melody) and so in the analysis of this particular piece I argue that we should view this sound not as the enchanting phantasmagoria Adorno describes, but instead reconsider it as a formally important breakthrough-suspension hybrid that complicates any analytically simple reading of the piece as a whole. Perhaps if we are to admit its ‘enchanting’ qualities it would be by returning once more to Michael Saler’s idea of a modern enchantment that ‘delights but does not delude’. From the reviews of Schreker’s *Kammersymphonie* in chapter 1 it is possible to see this reaction in nearly all of the responses to this

piece. Each critic was drawn to this unusual sound, asking: what should be made of it? How should it be analysed? Those reviews demonstrate that, at that particular historical moment, Schreker's piece was pushing the boundaries of what they considered acceptable, but also that many at the time considered the piece to not be an insignificant piece of orchestral 'window-dressing'. Considering Schreker's opening sound as a breakthrough-suspension hybrid rather than part of Adorno's inferior class of phantasmagoria seems to align with many contemporary reactions to the piece and gives further reason to analyse these elements in more detail.

Finally, if we return to one of Adorno's strongest timbral criticisms, that of 'insidious window-dressing', and compare the moment of breakthrough in Mahler's symphony with the timbral construction of Schreker's opening sonority then Mahler may come off worse. If we take 'window-dressing' to mean augmenting a product with extra decorative elements external to the product itself, Mahler's breakthrough does just that: the theme that was presented at the start without the extra orchestral apparatus is augmented at the moment of breakthrough with full orchestra. Of course, Adorno's response is that this moment of breakthrough has a disruptive formal *function*, but it is worth arguing that Schreker's recurring sound also has this disruptive formal function and that, in addition, the timbral elements of Schreker's sound remain central to the sound throughout — Schreker's notion of *Klang* is a more modern conception of the musical idea, where timbre can be internal and essential to a theme rather than externally added or removed.

Having made a potential case for each occurrence of Schreker's opening idea as being distinctive, both through their intra-compositional conflict and their deviation from inter-compositional norms, what are we supposed to make of these moments, analytically? There is a strong case for them having formal significance, if we compare their location within Gösta Neuwirth's formal analysis.³⁵⁴ Here they seem to outline two important structural moments: the beginning of the 'repeat' of the exposition and the beginning of the coda. I would add to Neuwirth's analysis, however, by observing that a modified version of the opening idea (henceforth 'Idea A') returns in the central scherzo section (bb.296-310), which could possibly be heard to function as the

³⁵⁴ Neuwirth (1981, xii-xviii). Neuwirth's structural analysis suggests, as a rough outline, that Schreker's piece be sub-divided into four main sections (Exposition, Adagio, Scherzo, Modified Recapitulation) followed by a Coda. His analysis also suggests that these sections follow a modified Sonata Form structure.

'missing' Idea A from the opening of the recapitulation section that immediately follows the end of the Scherzo (b. 421). The reason this modified Idea A was not included in my original list of motivic re-statements is due to the nature of its transformation: this recurrence presents the idea twice, and in both instances there is none of the tonal ambiguity or dissonance that is present in the original (see examples 1 and 2 in appendix 2a); it is also orchestrated much more conventionally (in keeping with the scherzo section as a whole, bb. 198-421). All that remains are the thematic references (the chromatically descending violin line, cf. bars 3+ with 296+) and the lavishness of the orchestration on its second presentation (bb.303-310). Finally, it could be argued that there is one more recurrence toward the end of the coda (bb.570-3, see appendix 2b). Here the thematic reference is not linked to Idea A, but one of the other themes of the introduction. However, the orchestration is similar enough in its construction to warrant its inclusion (it also creates a sense of formal symmetry in that it presents the final key of D major for the first time).

The notion that Idea A is prolonged and developed throughout the piece, over and above its status as a simple ritornello section, is productive. Beyond its loosely formal function, we could interpret these recurring blocks of sound as an example of a 'continuity illusion', visualised earlier in figure 2.6b. Of course, this recurring idea could not be heard as masking other elements within the auditory scene (it is not loud enough); rather, this blurred, distant musical figure could be masked by the rest of the music. However, if we examine the ecological criteria set out by Bregman (p. 118), we see that it only fulfils 3 out of the 4 conditions, and thus the sense of prolongation must be considered less grounded in firm ecological/acoustic principles and rather as a more speculative response, consistent with the fin-de-siècle methodologies developed by critics such as Kurth. Of course, fin-de-siècle theorists did not analyse *timbre* in this way; nor, in many pieces, does timbre function in this way. However, in a piece such as Schreker's *Kammersymphonie*, where this recurring figure seems to be of structural importance, it is worth drawing specific attention to timbre's form-defining role.

Fin-de-siècle prolongational analysis dealt primarily with the idea that a parameter can be sustained, intensified, or relaxed. Returning to the idea put forward in chapter 1, that a timbral analysis should not necessarily be undertaken in isolation from music's other parameters, it is noticeable that harmony and timbre do not always work in parallel. In the analysis that follows, I am hoping not only to construct a working analytical method to analyse timbre in Schreker's piece, but

also whose result can be compared to fin-de-siècle analytical methods and therefore understand whether, in this piece, timbre's role is in any way comparable to that usually assigned to those parameters traditionally considered primary.

To explore this idea of timbral prolongation within Schreker's *Kammersymphonie* I suggest a modification of the 'Prolongational Reduction' model found in Lerdahl and Jackendoff's *A Generative Theory of Tonal Music* (1983).³⁵⁵ The strength of this part of Lerdahl and Jackendoff's analytical model is that the tree diagrams they suggest enable a *relative* comparison of important moments in a piece rather than examining each timbral moment in isolation (as I have been doing up until now).

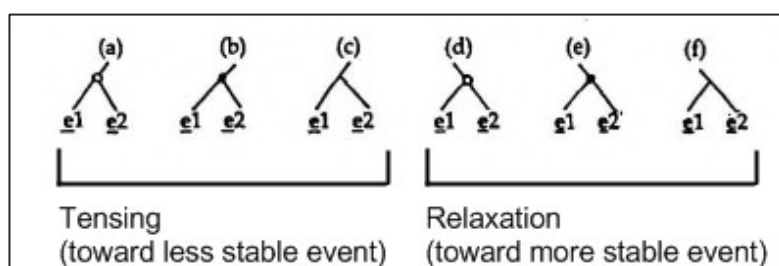


Figure 2.7 — Lerdahl's hierarchical branchings.³⁵⁶

An open dot on the branchings represents what Lerdahl call a “strong prolongation” (a repeat); a filled dot, a “weak prolongation” (modified form); no dot equals not a prolongation, but a “progression” (i.e. the two events are unrelated).³⁵⁷ A right-branching pattern (2.7a-c) represents a tensing motion toward a less-stable event; left-branching patterns (2.7d-f) signify a relaxing motion to a more stable event.

The problem, for Lerdahl in his 1987 article on timbre, lies in the fact that he has set himself the impossible task of thoroughly categorising and ranking each distinct timbral constellation. However, in our case, this should no longer be seen as a problem given the discussions that have led to this point: Bregman's auditory scene analysis principles provide a firm grounding with which to

³⁵⁵ Lerdahl and Jackendoff's theory is now quite dated, and has had its share of criticism (Niels Chr. Hansen's recent article (2011), for example, summarises these neatly: namely, the inability to cope with polyphonic textures; the inconsistency between 'top-down' (global) and 'bottom-up' (local) procedures; and the 'universality' of many of its claims). However, this analysis avoids many of those problems by choosing only the appropriate aspects of the method, focussing only on the fourth strand of a full analysis, which Lerdahl and Jackendoff label 'prolongational reduction'. This analysis also narrows its scope to focus primarily on perceived patterns of tension and relaxation as a result of harmonic and timbral interactions.

³⁵⁶ Adapted from Lerdahl (1987, p. 139).

³⁵⁷ Lerdahl (1987, p. 139).

make judgements on timbral groupings, upon which Lerdahl's hierarchical model could provide greater structural insight than was previously possible. I would suggest that the criteria for judging 'timbral intensity' are as follows: 1) whether the timbres involved are varied (e.g., harp, trumpet, and double bass) or a homogenous group (e.g., all clarinets, or all upper strings); 2) whether the timbres are blended together/masking one another, or distinct, perhaps with a sense of *dialogue* between individual instruments; 3) the idea of timbre as an emergent parameter, and whether the dynamics are loud enough to make the tone incredibly bright or harsh; and 4) whether the instruments asked to play in a way that would involve audible *strain* or *distortion* from accepted 'good' tone.

The last two elements are not evident in this particular case study, but are included for completeness; all of the instances of Idea A are quiet and Schreker's use of the instruments within those instances are handled so that there is no audible strain. It is important to state prior to the following analysis that my judgements are based, as closely as is possible, on fin-de-siècle principles and responses to timbre, as discussed earlier in this thesis.

In this case, we are only examining the recurrences of Schreker's 'Idea A' and the methodology for identifying those (thematic similarity or instances of suspension-breakthrough) was mentioned above.

Figure 2.8 displays the two prolongational analyses; the top tree refers to timbre, and the second examines the harmonic intensity.

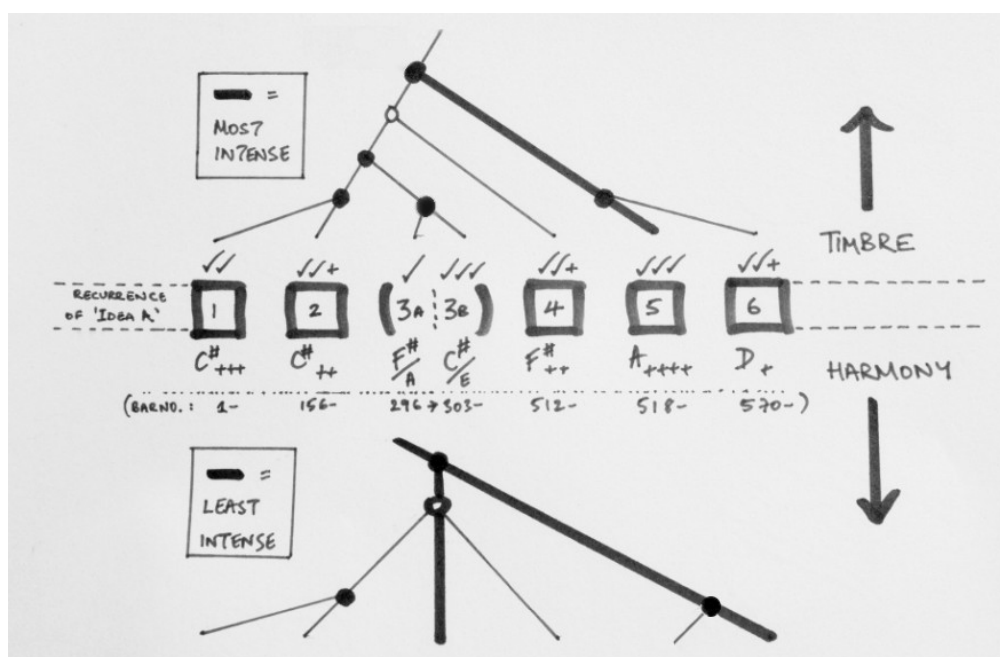


Figure 2.8 — A prolongational analysis of timbre and harmony in the 6 recurrences of Schreker's opening idea in the *Kammer-symphonie*.

Harmonically, the least intense (dissonant) recurrences are 3a and b (F[#] and C[#] major in first inversion, respectively), and recurrence 6 (D major, with added 6th) which, as the left-leaning branch indicates, is considered the most stable, given that 3a and b are not in root position. Recurrences 2 and 4 contain slightly less dissonance than the opening idea (refer back to chapter 1). The most harmonically dissonant moment is recurrence 5 (starting in b. 518):

b. 517

U. E. 6032.

Figure 2.9 — Recurrence 5 of 'Idea A' in Schreker's *Kammersymphonie* (starting in b. 518)

The harmony is loosely A major, as reinforced by the 3 cellos, double bass and harp, but with numerous added notes: F-natural and G^b in the piano; F[#] in the trumpet, horn, and celesta; B in bassoon, oboe and flute; C-natural in the viola; and B[#], D[#], F[#] and F-natural in the harmonium. These two bars contain 10 of the twelve notes of the chromatic scale (only G and B^b are missing). Harmonically, then, it should be equivalent in dissonance to the ‘*Erwartung* chord’ we examined in chapter 1 (figure 1.3), yet it sounds far less dissonant due to its timbral presentation. As the upper half of figure 2.8 shows, this is the moment of greatest timbral complexity: the timbres present are extremely varied and there are numerous timbral layers masking and un-masking one another in flux. However, there is one similarity to Schoenberg’s *Erwartung* chord in that it is the specific make up of the respective timbral layers that allow this to be heard as an intensified functional dominant to the D major chord that comes two bars later (b.521). The static, sustained A-major layer in the cellos and double bass allows for a stable and persistent harmonic foundation for the other layers to play against. In addition, the most dissonant layer (the harmonium) is marked *ppp*, and tremolo. As a result of the extremely quiet dynamic, and the speed with which it alternates between the two dissonant chords, the harmonium barely speaks and is mostly masked within the auditory scene by the other more prominent (and less dissonant) layers.

Recurrence 5 is an important formal and tonal juncture in the piece, functioning as the dominant of the final key of D major — a key far-removed from the opening C[#] minor/major ambiguity. Schreker’s presentation of this dissonant harmonic cluster, whose dissonance is diffused by its complex timbral presentation, allows the listener to hear this moment as significant due to it being the most timbrally and harmonically complex version of this recurring idea in the piece but also because its timbral construction clarifies the underlying harmony and allows this otherwise dissonant chord to be heard functionally as the dominant chord of that which follows.

Recurrence 3a and b immediately follow one another and are isolated within figure 2.8 because, as mentioned above, they are not literal repeats of Idea A but do contain its thematic material. They are worth mentioning, however, because Schreker treats the role of orchestration very differently in these two instances. Recurrence 3a begins in F[#] major, first inversion, and rather than the subtle blending of fluctuating layers that is present in the other recurrences of Idea A, here Schreker has reduced orchestra with a clear melody and two or three accompanying layers in simple

dialogue. Recurrence 3b immediately follows, shifting back to the tonic of C[#] major, again in first inversion. However, whilst recurrence 3b is a transposed repeat of the thematic material, the orchestration is much more lavish, with increased numbers and flowing arpeggios in harp and celesta that are exactly the sort of figuration that was found earlier on in the chapter as examples of the flowing lines and arpeggios of musical '*Jugendstil*'. Occurrences 3a and b are found within the central 'Scherzo' section of Schreker's *Kammersymphonie*, where the tone is altogether more playful and dancelike. In these two modified repeats of the opening idea, Schreker appears to have fallen into the category of orchestration that Adorno would call 'window-dressing': a clear theme, whose repeat contains no changes, other than more extravagant orchestration. Nor does it serve any particular harmonic function as it did in the other occurrences of Idea A. Here, then, the orchestration could be dismissed by an early twentieth century critic as 'decorative'.

Perhaps, however, a different view could be taken. One that sees the timbral construction of these central appearances as still having a formal function. In this central scherzo, as has been said, the mood is light-hearted and playful. Schreker, in choosing to use orchestral configurations that a fin-de-siècle Austro-German listener might hear as more straight-forwardly 'decorative', has augmented this sense of playfulness so that when we return to the more serious outer sections, with their 'functional' timbre, the contrast is all the more clear. The variety of orchestral styles in Schreker's piece is no doubt part of the reason that reviews of this piece were sometimes at a loss as to how to respond critically to the timbral element of the *Kammersymphonie*. However, it also shows that it was created at a point in history where orchestration styles were beginning to become established and varied enough that compositions such as this could contain different orchestral tropes that might function formally with/against one another and that 'decorative' orchestration might serve as a foil to orchestration that is more complex. Returning once more to Saler's idea of modern enchantment, it is the *awareness* of that enchantment that makes it modern and the juxtaposition of such contrasting orchestration styles in the *Kammersymphonie* certainly allows for a more complex musical narrative.

The final point to make about the timbral aspect of figure 2.8 is that it shows (if we are not including 3a and b, due to their different construction) a steady increase in complexity followed by a final moment of relaxation. If we were to have viewed timbre independently, a straightforward

interpretation of timbre's role in the musical narrative might have been possible: the increasing complexity drives the piece forward to a final moment of stability. However, a comparison between timbre and harmony showed that the relationship was more complex and that, in addition, a simple harmonic analysis independent of timbre's role would have a many moments appearing to be more dissonant than they actually sound. In the *Kammersymphonie*, Schreker uses his orchestral configurations to temper his harmonic language in a way that, at times, sees the two as an inseparable fusion or convergence.

This chapter's analyses should be viewed more as a constellation of analytical ideas, it was not really about 'tying together', but rather evoking a number of analytical questions and exploring how timbre in fin-de-siècle Vienna might be analysed. The next three chapters, however, each begin to necessarily narrow their focus on one particular historically-grounded aspect of timbre's fin-de-siècle musical role. Chapter 3 returns to the ecological ideas put forward in this chapter, continuing to deconstruct fin-de-siècle timbral assumptions from this perspective and moving the discussion towards the perceived correlation between colour in visual art and timbre in music — a debate that was particularly prominent in fin-de-siècle Viennese circles. Colour in visual art was seen to hold a similar status to that of timbre in music, and to function in a similar fashion. Chapter 3 then analyzes the perceived correlations between the two art forms, and through a number of case studies finds further evidence to support and develop this chapter's partial claim that timbre can function as a spatial signifier within the auditory scene.

Colour, Brightness, and Timbre

Examining Timbre's Role in Auditory-Visual Comparisons in Fin-de-Siècle Vienna

The response to the relationship between timbre and colour in fin-de-siècle Austro-Germanic circles was a mixed one. Both composers and critics had begun to use the term *Farbe* [colour] when describing music's varied timbral constructions, and with this supposed similarity of function came a similarity of response to the use of 'colour' in both visual art and music (in particular, its perceived 'negative' effects as a 'surface' parameter). In addition, the early decades of the twentieth century saw Schoenberg experiment with the idea of *Klangfarbenmelodie* and—as his relationship with the Russian painter Wassily Kandinsky developed—the creation of music that involved visual colour as a key synaesthetic tool.

This chapter explores the perceived relationship between colour and timbre at the fin-de-siècle, through discussion of Kandinsky and Adorno's views on the topic, followed by the analysis of three 'synaesthetic' works from the period. The aim is to establish where visual colour and timbre can be seen/heard to converge, to deconstruct fin-de-siècle assumptions about the way these parameters interacted, and, as a result, to understand timbre's musical role in greater detail. The chapter suggests that, in both art and music, (tone-)colour has an important sub-parameter: *brightness*. Whilst certain individual timbres or visual colours can have clear symbolic associations (either learnt, or synaesthetic) that have potential analytical implications, this chapter argues that associative correlation *between* colour and timbre (whilst interesting) is highly personal, and, instead, that it is timbral *brightness* which provides a generally perceived correlation between the visual and the auditory that can be used analytically.

The first half of the chapter examines fin-de-siècle viewpoints regarding the relationship of visual colour and timbre, using this as the contextual foundation for three short case studies. It is the convergence of visual and timbral *brightness* (rather than individual timbres and colours) in these three potentially synaesthetic musical case studies that contributes to the effects perceived therein. Having established this relationship, the second half of the chapter argues that, through this audio-

visual convergence, and with recourse to the ideas discussed in the previous chapter, timbral brightness also works as a signifier of musical spatiality and distance. Following the model established in chapter 2, the second part of this chapter uses current methodology in order to explore a further angle on the historical question this thesis sets out. The chapter ends with a musical case study based on Schreker's opera *Der ferne Klang* (1903-10), which, through the spatial models developed earlier in the chapter, suggests similarities with Klimt's stylistic use of perspective in his 'telescopic' landscape paintings and examines how timbre's spatial construction functions in relation to subject position at key moments in the opera's narrative.

Colour and timbre were virtually synonymous terms in Vienna at the fin-de-siècle. Eduard Hanslick employed such cross-modal terminology³⁵⁸ in 1892 when lamenting the orchestral writing of the upcoming generation of Viennese composers: "colour is everything, musical thought nothing".³⁵⁹ Robert Hirschfeld provides another example in his review of Mahler's Fifth Symphony:

"[Mahler is] a virtuoso of the orchestra [who] placed in this movement an immense series of sound effects which change almost with every bar. The lighting changes continually—a counterpoint of colours."³⁶⁰

Indeed, Mahler's correspondence indicates that he used the idea of colour so pervasively to speak about music that it suggests a strong parallel with visual art:

We moderns need such great apparatus in order to express *our* ideas, whether they be great or small. First, because we are compelled, in order to protect ourselves from false interpretation, to distribute the various colours [*Farben*] of our rainbow over various palettes; secondly, because our eye is learning to distinguish more and more colours in the rainbow[.] (7. February 1893)³⁶¹

In all three cases, the writers do not justify their use of such terminology. One can therefore assume that it had become commonplace to use colour and timbre interchangeably in musical discourse of the time, whether as a positive or negative value judgement. Nor was it a passing phase: Schoenberg,

³⁵⁸ Here I refer to terminology that originates from the attempt to describe an art form specific to a particular sensory modality (e.g. painting and vision, or music and hearing), but which has also taken on its own significance in describing art forms external to that from which it originated (e.g. musical *line*, *colour*, *brightness*; or visual art's *tonality*).

³⁵⁹ 1892 review of Richard Strauss's 'Don Juan' in Hanslick (1988, 291).

³⁶⁰ "...ein Kontrapunkt der Farben", taken from Knittel (2010, 105).

³⁶¹ *Selected Letters of Gustav Mahler*, Martner (1979, 148-9).

in his *Harmonielehre* (1911), talks of *Klangfarbenmelodie*,³⁶² and Adorno's *In Search of Wagner* (1937-8, fp. 1952) devotes an entire chapter to the orchestra, entitled "Colour".³⁶³ The widespread use of such terminology, over a prolonged period of time, prompts a deeper examination of auditory and visual modes of response and the underlying fin-de-siècle assumptions that allowed these cross-modal parallels to be drawn.

This fin-de-siècle perception of a specific relationship between colour and orchestral *timbre* appears to be a relatively late development. Prior to this most theorists equated colour with various other musical parameters (pitch, pitch intervals, key, or harmony) with various reasons ranging from the philosophical and symbolic to the (quasi-)scientific or physiological (synaesthetic). "Such experiments", writes art historian Peter Vergo, "foundered ultimately on the rock of human subjectivity" even when such experiments gave the appearance of validation through scientific rigour (e.g. Newton's *Opticks*, 1704). "In particular, there was a notable lack of agreement as to which colours corresponded to which musical tones".³⁶⁴ These earlier experiments—such as Newton's influential equating of the 'seven' colours of the spectrum with the seven tones (1675); or the eighteenth-century colour-keyboards of Castel and Krüger, amongst many other speculative investigations³⁶⁵—show little consistency with one another. Even when certain theorists *could* decide which musical parameter equated with which colour, the results are ambiguous at best. Returning to the early twentieth century, Kandinsky's *On the Spiritual in Art* (1912), with its variety of subjective synaesthetic associations (violet: sad, sickly, old women's clothing, the *cor anglais*, and "in its deeper tones it resembles those of the lower woodwind"; or orange: a "man sure of his powers", healthy, serious, a "viola playing a largo"³⁶⁶), does begin to *associate* colour with timbre. However, this is still not a direct *equation* of the two parameters: Kandinsky considered such relations difficult, describing them as "extremely provisional and clumsy" when depicting the "subtler vibrations in the soul",³⁶⁷ and when he came to write his stage piece *Die gelbe Klang* [The Yellow Sound], first published in 1912, he was much less specific as to how he expected the orchestration to sound in comparison to the frequent

³⁶² 'Tone-colour-melody' in Schoenberg (1978, 421-2).

³⁶³ Chapter 5, 'Farben' (Adorno 2005b). It is interesting that Adorno separates his discussion of 'Colour', from the preceding chapter, entitled 'Sonority'.

³⁶⁴ Vergo (1980, 224 n.12).

³⁶⁵ For a complete historic overview, see both Jewanski (2010), and the more detailed Jewanski (2007).

³⁶⁶ Kandinsky (1982, 189, 188)

³⁶⁷ *Ibid.*, p. 189.

coloured light changes, leaving the music composition to Thomas von Hartmann.³⁶⁸ Even if Kandinsky had described the correlations in minute detail, it would arguably tell us little about how the piece might be experienced in the theatre and more about Kandinsky's subjective response to timbre and colour. Whilst a potentially fascinating topic, it falls outside this chapter's scope.

Writers and composers at the fin-de-siècle felt that there was some affinity between visual colour and orchestral timbre, even when not specifically discussing synaesthetic relations: the separate responses to the *effects* of colour within art and orchestration (i.e. 'musical colour') within music show a clear similarity of response. Two more recent texts have addressed the responses to each: David Batchelor's *Colour* (2008), an edited anthology of writings on colour in the visual arts from the mid nineteenth century onward; and Karen Painter's chapter 'Sensuality and Redemption', from *Symphonic Aspirations: German Music and Politics 1900-1945* (2007), which discusses the trends in musical response.³⁶⁹ After reading Painter's chapter, much of the terminology in Batchelor's introduction to the problems of writing about colour in the visual arts feels instantly familiar. Batchelor writes of visual colour being equated with "drugs, sex and pleasure" and typically regarded as "superficial, supplementary, and cosmetic". Colour may be "[a]ttractive to children perhaps", Batchelor suggests, but it becomes a "potential distraction, or worse, for adults":

Often regarded as feminine, as too connected to the senses and the emotions, to the body and to pleasure, colour threatens to get in the way of the more serious, intellectual and masculine business of drawing and forming. Although, having said that, there are always those for whom the disorderly, disruptive and occasionally narcotic character of colour has been its principal asset.³⁷⁰

Given the terminology used, Batchelor could just as easily be providing the introduction for a synoptic survey of responses to *orchestration* in fin-de-siècle Austro-Germany, as the language and tropes used are strikingly similar. Painter's survey of critical response to such orchestration reads as an almost identical list: tropes of physicality, sexuality, addiction, jewellery, clothing, degeneracy, surface, gloss, sensuality, and the feminine.³⁷¹ Robert Hirschfeld, for example, wrote in 1909 that the

³⁶⁸ See complete text of play in Kandinsky (1982, 267-284).

³⁶⁹ Batchelor (2008). Batchelor also has published a book-length essay on colour reception entitled *Chromophobia* (2000). Karen Painter's excellently-sourced book chapter (*Sensuality and Redemption*, 2007) took two earlier forms as a PhD thesis (1996), and journal article (1995). Christopher Hailey's chapter *Der ferne Klang: "so ganz etwas Neu's"*, (1993, 34-53), also provides an excellent discussion of such issues.

³⁷⁰ Batchelor (2008, 19)

³⁷¹ Painter (2007). See pp. 84, 105, 109, 88, 107, 93, 89, 92, 101, respectively.

“longer we deal with Mahlerian symphonies [...] the more strongly we become attached to orchestral undressing and decorating, and to the cosmetics that give the meagre motifs the appearance of meaning”,³⁷² separating orchestration from ‘true’ meaning and instead associating it with ideas of addiction, sensuality and superficiality in similar fashion to Batchelor’s quotation above. Whilst Painter’s summary is exhaustive, one further quotation from another source, Viennese-educated music theorist Ernst Kurth, further strengthens the point. Kurth sees musical colour as largely residing in harmonic change and chromatic coloration.³⁷³ However, the end of Kurth’s first *Bruckner* volume (1926) discusses ‘instrumental colour’, once again putting forward the idea of orchestral colour as superficial:

If harmony is the play of colour reflected from within, so the instrumentation represents more the external coating [*Umhüllung*]. [If] one characterizes Bruckner’s orchestration as extremely grandly-lit [*lichtprunkend*] and intoxicating, one is so far correct in that this ability was also at his disposal. However, [this] overlooks the key idea: that his orchestral colours range from the most severe asceticism to the other extreme, controlling all intermediate steps, and constantly deployed from viewpoints which ridicule accusations of exterior pomp.³⁷⁴

Here Kurth perpetuates the discourse of orchestral colour as an external, potentially intoxicating parameter (although Bruckner’s music manages to partially escape this criticism). Writing long after the end of the first World War (the date that Painter suggests as a cut-off point for such discussions),³⁷⁵ Kurth places greater value on *harmonic* colour due to its involvement with the ‘inner’ workings of the music, compared to the ‘exterior shell’ of the instrumentation. Kurth justifies Bruckner’s sometimes ‘intoxicating’ orchestration by conceding that his instrumentation often ‘comes from inside’ the musical material, thus no longer being viewed entirely as superficial.

A similar sense of surface-object dichotomy, this time concerning the visual, can be traced in Walter Benjamin’s *A Child’s View of Colour* (1914-15). Benjamin argued that as adults we view colour as

³⁷² Robert Hirschfeld, 1909, quoted in Painter (2007, 108-9).

³⁷³ Kurth (1991). See specifically the sections from Kurth’s *Romantische Harmonik und ihre Krise in Wagners “Tristan”*, 1920, especially the section ‘Effects of color contrasts’, pp. 100ff; and ‘Harmonic shading’, pp. 103ff. Here Kurth talks of ‘contrast’: of moves toward the sharp keys, as brighter, and towards the flat keys as darker. He also uses the term ‘shading’ when referring to the chromatic alteration of individual tones within a chord.

³⁷⁴ “Wie die Harmonik das aus dem Innern ausgespiegelte Farbenspiel, so stellt die Instrumentation mehr das der äußeren Umhüllung dar. [...] Wenn man Bruckners Orchestration als überaus lichtprunkend, berauschend bezeichnete, so ist daran soviel richtig, daß ihm auch diese Fähigkeit blendend zu Gebote stand, aber das Schlagwort übersieht, daß seine orchestralen Farben zwischen strengster Askese und jenem andern Extrem sämtliche Zwischenstufen beherrscht und ständig aus Gesichtspunkten verteilt, die dem Vorwurf des äußerlichen Poms Hohn sprechen”. Taken from the final section of chapter 5: *Klang und Entwicklungsdynamik*, entitled ‘Die instrumentale Farbe’, Kurth (1926, 583).

³⁷⁵ Painter (2007, 119-121).

“a layer of something superimposed on matter [...] regarding it as a deceptive cloak for individual objects existing in time and space”.³⁷⁶ Benjamin’s viewpoint—that with age comes the wisdom to see past the deceptive layers of the colourful world, and move beyond naïve fascination—echoes the wider fin-de-siècle tensions discussed in previous chapters, and foreshadows Adorno’s *Schreker* essay, especially when Benjamin continues by suggesting that children have a “fascination with the way colours shimmer in subtle, shifting nuances”, citing soap bubbles as one example.³⁷⁷ Adorno’s description of Schreker’s music follows a similar pattern in that the “opalescent resonances” and the “shimmer” of his compositions leads to the conclusion that it is too surface-colour orientated, and that as a result “Schreker’s music is music for puberty”.³⁷⁸ Elsewhere, Adorno confirms his adherence to the idea of orchestration as (feminine) surface; as clothing, he writes, “it is all dolled up. The Romantic orchestra, even the virtuoso orchestra of Strauss and Schreker, was never developed from the musical material. Rather, it is placed around the musical events, like a cloak.”³⁷⁹ Viewing visual and musical colour in this way implies that the cloak can be removed — that colour can be considered independently of its object, rather than as integral to, or in relation with it.

This idea was emphasized in chapter 1, with the discussion of the piano transcription, and the comment from Berrische which suggested that the piano transcription was the equivalent of a black and white version of a piece. Current musicological writing highlights such analogies, particularly Thomas Christensen’s article on the topic, Painter’s chapter, and Alexander Rehding’s monograph *Music and Monumentality*.³⁸⁰ Instrumental ‘colour’, however, could be returned to the piano reduction through what Adorno describes as the “gesture of memory” in which performers “preserve [an] active relation” to a remembered concert performance.³⁸¹ In such playing the performer does not simply play the piano version, but inwardly evokes the orchestral colours of past orchestral performances. The same is true visually, with regard to a black and white photo: if in the following photograph (figure 3.1) I asked what colour the man’s hair was—or the bricks, or the chair, or the road—one might have a pretty accurate idea, even if the objects in the photo had never been seen before.

³⁷⁶ Benjamin, quoted in Batchelor’s anthology (2008, 63).

³⁷⁷ Ibid.

³⁷⁸ Adorno (1998, 140, 136, 142).

³⁷⁹ Taken from *The Orchestration of Berg’s Early Songs* in Adorno (1999, 80).

³⁸⁰ Christensen (1999, 274ff.) and the third chapter, ‘Sounding Souvenirs’, of Rehding (2009).

³⁸¹ Adorno (2005a, 3)



Figure 3.1 — What colour is the man's hair?

Colour is evoked through familiarity and the memory of similar objects — the ‘gesture of memory’. Rehding uses a similar term when discussing piano reductions: the idea of music functioning as a ‘souvenir’.³⁸² Rehding’s souvenir metaphor is more appropriate, I suggest, as it does not restrict the effect to those who have *already heard* an orchestral performance of the piano transcription. This ‘souvenir’ theory works if I receive a black and white postcard from a seaside resort to which I have never been, or play an unfamiliar piano transcription of a work by a composer whose orchestral style I am familiar with — colour is inferred from a certain level of object recognition, familiarity, and experience of similar situations.

However, whilst the piano transcriptions and black and white photograph display similar relations to their own colour equivalents, they are not equivalent processes. The black and white photo is simply a removal of colour via a mechanical, *objective* process. The piano transcription is far from that. It is bound by the limits of instrument and performer, and in some cases is closer to an arrangement or re-composition, with a number of subjective choices being made in the process. Often the aim of a piano transcription is, rather than to remove all instrumental colour, to *retain* as much of the orchestral character as possible.

It would be convenient, in this chapter on the effect of colour, if one could adopt a late-nineteenth-century viewpoint that a piano transcription was a colourless version of an orchestral piece and analyze what was missing. A black and white photo can function as an analytical tool to

³⁸² See specifically p.106, of Rehding (2009).

assess the relative brightness of the elements of a scene, but it is not so straightforward with regard to the piano transcription. For example, certain visual objects that were quite visible and distinct in colour are no longer distinguishable in the black and white version due to their equiluminance.³⁸³ If the analogous situation occurred within a piece of orchestral music, the transcriber could still choose to retain the independence of the two musical lines by altering them within certain boundaries. However, when given a situation from a fin-de-siècle composition where timbre is often the pre-eminent parameter, and where pitch and rhythm do little to distinguish one voice from another, the transcriber has a difficult choice of how to proceed. Often this resulted in spatially cramped piano writing, or simplification of the voices to make such moments playable and, as numerous orchestral works treated orchestral colour increasingly as a primary parameter, the piano transcription relied more and more on the imaginative faculties of the performer—and their greater technical skill—to (re-)create satisfactory performances.

The lack of objectivity in the piano transcription's compositional process, when compared to the black and white photograph, means that it cannot be used as a consistent tool to measure the effects of instrumental colour's removal from a piece. Instead, given the fin-de-siècle perception that colour and timbre had similar effects and functions, outlined above, I suggest a deconstruction of these attitudes through the examination of a number of musical stage works that explicitly attempt to use visual colour and timbre in alliance, and through two contrasting contemporary texts that approach the issue from opposing directions. How, where, and why were timbre and colour's effects perceived to converge in function? To find some answers, we return to Adorno's essay on music and painting, partially discussed in chapter 2, in which he approaches the topic from a sceptical standpoint and compare it to Kandinsky's *On the Spiritual in Art* (1912), a work more positively disposed toward synaesthetic correspondence of the arts. Despite such opposed starting positions moments of convergence emerge from their writings.

³⁸³ If colours have the same brightness (as distinct from hue) they are said to be equiluminant, and appear as the same shade of grey in black and white renderings.

3.1 — Adorno and Kandinsky: On Some Relationships between Music and Painting

Adorno writes that:

Musical theory simply cannot manage without the quasi-optical term “tone colour”. One need only try to replace it with another term. There is none to be found. It is as if with the coloristic dimension, to which music has only relatively recently begun to pay attention, painting had penetrated into the innermost composition of music [...]³⁸⁴

Adorno’s choice of words suggests an underlying fundamental equivalence, or *Konvergenz*, between painterly and musical colour of the type already discussed. But it is also because of this perceived equivalence that Adorno is critical of Kandinsky and the synaesthetic “I hear the light”³⁸⁵ movement. Identifying Kandinsky as “probably the first” to talk of sounds in his paintings, Adorno carries on to suggest that the ‘convergence’ of colour across the arts is an asymmetrical one: “‘Tone colour’ has something compelling about it”, whereas the opposing concept of ‘picture tone’ is seen as highly constructed — a type of “arts-and-crafts modernism”.³⁸⁶

The games that were played under this rubric, to which anyone who has convinced himself of the immanence of convergence is doubly allergic, go back to the synaesthesia that was familiar [...] to the art of the mid-nineteenth century of *Tristan* and Baudelaire. What is bad about synaesthesia is identical with what is unobjective; it is subject to Loos’s verdict. The person who makes a principle of synaesthesia would like to say twice, by linking various media and exploiting various—dubious—analogs between their phenomena, what has already been said once [...] The convergence of music and painting is the opposite of such tautology.³⁸⁷

The implication of Adorno’s passing reference to the architectural aesthetics of Adolf Loos is that the duplication of labour found in synaesthetic works is ‘ornamental’. For Adorno, the functional convergence of colour across the two art forms means that such ‘tautological’ duplications are unnecessary, but also that such duplications can never be more than approximate—‘dubious’—analogs. Adorno sees this ‘duplication-as-crime’ not only in the “colour tone music” of the early twentieth century, but also in the work of Wagner who “failed” to reach the utopian vision of the *Gesamtkunstwerk* by “mixing” media rather than fostering a dialectical relationship and allowing “the transition from each [medium] to the other by way of its own extremity”, or principles.³⁸⁸ His

³⁸⁴ *On Some Relationships between Music and Painting* in Adorno (1995, 73).

³⁸⁵ *Ibid.*, 67.

³⁸⁶ *Ibid.*, 73-4.

³⁸⁷ *Ibid.*, 74.

³⁸⁸ *Ibid.*

reference to Baudelaire shows equal suspicion of the influence of the French Symbolist movement, and specifically Baudelaire's idea of synaesthetic correspondence between the arts — “the keyboard of universal *correspondences!*”.³⁸⁹ Initially, Adorno's idea of convergence seems contradictory: is colour equivalent across the two arts or is it not? But what Adorno is actually describing is his distinction between “the immanent relation of one medium to [an]other” on the one hand (moments where visual and auditory elements function in the same way), and, on the other, the “syncretistic combination in the style of Scriabin's *Prometheus*” (which Adorno portrays as a forced union because the elements lack this ‘convergence’ of function).³⁹⁰ In certain cases, Adorno suggests a potential functional equivalence between the parameters of colour and timbre. However, he finds it problematic to equate specific colours with specific tones or sonorities, for such judgements are highly subjective (as the variety of responses attests). In addition, referring back to the ‘syncretistic’ remark above, it seems that part of the problem for Adorno is the sense that Scriabin's piece is somehow being disingenuous or deceptive in the way it presented colour and sound together as parameters that had a functional convergence.

The idea behind Adorno's search for ‘convergence’ is to highlight how these two cross-modal parameters can work with similar effect, and provide a basis for comparison that doesn't require a systematic equivalence (e.g. trumpet = bright yellow) of colour and timbre. The aim is to find equivalence of *function*, rather than symbolic meaning. Unlike Adorno, however, this chapter does not intend to ascribe positive or negative value judgements based on how well the visual and auditory elements ‘converge’ in function, but rather use these fin-de-siècle viewpoints as the contextual ‘way in’ to analysing where the auditory and the visual align or diverge. The moments of divergence are often equally interesting, analytically, but for us to be able to examine the role timbre plays in relation to visual colour we now need to examine this relationship further in order to pinpoint which particular elements provide this perceivable correlation.

It is understandable why Kandinsky's direct equivalence of particular colours with particular tones (refer back to earlier examples) did not appeal to Adorno, especially given Kandinsky's

³⁸⁹ Baudelaire, quoted in Harrison, Wood and Gaiger (2001, 487).

³⁹⁰ Adorno (1995, 74).

admission that “all these assertions are the results of empirical-spiritual experience and are not based upon any positive science”.³⁹¹ What then are we to make of Kandinsky’s writings? For whilst one might be able to empathise with certain of his observations, e.g. “bright lemon yellow hurts the eye after a short time, as a high note on the trumpet hurts the ear”,³⁹² one cannot agree that bright lemon yellow *is the same* as the sound of the high trumpet. Kandinsky constantly speaks in simile rather than metaphor, and it is clear from the prevalence of cross-modal comparisons in his text that Kandinsky does perceive specific synaesthetic correspondences as important, however ‘provisional and clumsy’.

Despite Kandinsky’s attention to what Adorno would call the ‘tautology’ of the synaesthetic, there are greater correspondences between the two authors’ texts than perhaps Adorno would care to acknowledge, for both writers argue against one art-form imitating or mimicking another whilst abandoning its own inherent principles. Kandinsky writes:

Comparing the resources of totally different arts, one art learning from another, can only be successful and victorious if not merely the externals, but also the principles are learned. I.e., one art has to learn from another how it tackles its own materials and, having learned this, use in principle the materials peculiar to itself in a similar way [...]³⁹³

Adorno’s sentiments echo this when he states that “[t]he moment one art imitates another, it becomes more distant from it by repudiating the constraint of its own material, and falls into syncretism, in the vague notion of an undialectical continuum of the arts in general”.³⁹⁴

Both authors suggest that colour/timbre is the parameter responsible for the spatial element in each art form. Adorno’s views, and timbre’s role in music’s spatial construction, were discussed in the previous chapter. Kandinsky suggests that colour has a similar role: to modify spatial perception in visual art (see figure 3.2).

³⁹¹ *On the Spiritual in Art* in Kandinsky (1982, 179).

³⁹² *Ibid.*, 157.

³⁹³ *Ibid.*, 154.

³⁹⁴ Adorno (1995, 67).

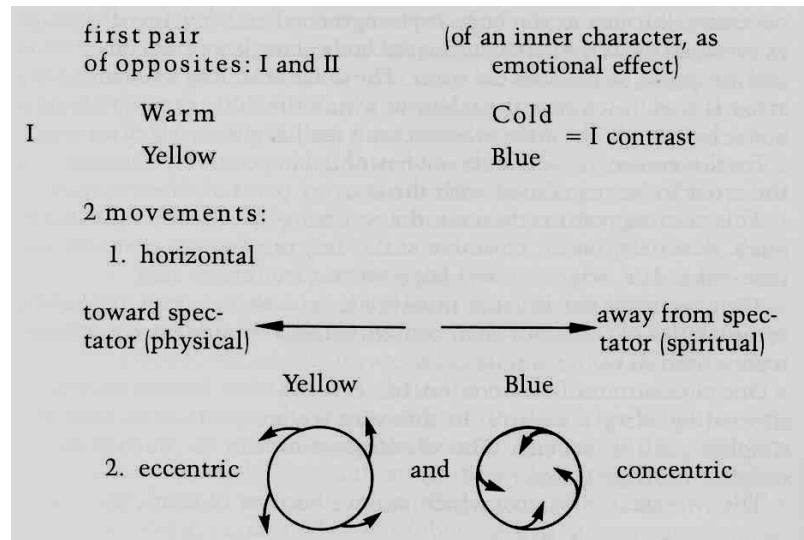


Figure 3.2 — Kandinsky's first table from *On the Spiritual in Art* ³⁹⁵

Kandinsky takes the primary opposition from Goethe's *Colour Theory* (1810) of yellow and blue, and asserts that “the warm colours [*those that approach yellow*] mov[e] in this horizontal plane in the direction of the spectator, striving toward him; the cold [*those approaching blue*], away from him”.³⁹⁶

The second spatial ‘movement’ of colour takes the form of ‘eccentric’ and ‘concentric’ motion:

If one makes two circles of the same size and fills one with yellow and the other with blue, one notices after only a short period of concentration upon these circles that the yellow streams outward, moves away from the center, and approaches almost visibly toward the spectator. The blue, however, develops a centripetal movement (like a snail disappearing into its shell), and withdraws from the spectator. The eye is stung by the first circle, while it immerses itself in the second.³⁹⁷

Again Kandinsky emphasises the idea of *distance* created by what he perceives as the extremes of the colour spectrum: yellow and blue. Green, as a mixture of the two, lacks movement as it hides “the paralyzed forces of yellow and blue”, although “it may yet become active again” if either colour constituent we increased.³⁹⁸

Presumably, this “gift for depth” found in blue and “lack” of such a gift in yellow,³⁹⁹ means that, for Kandinsky, it is primarily in the contrast of colours that perception of depth and space in painting is created.

³⁹⁵ Adapted from *Ibid.*, 178.

³⁹⁶ Kandinsky (1982, 179)

³⁹⁷ *Ibid.*

³⁹⁸ *Ibid.*, 180.

³⁹⁹ *Ibid.*, 181.

However, one suspects Kandinsky is conflating the effects of colour and brightness into one unified parameter as he later writes that the depth-movement effects he described are “heightened if one adds the contrast between light and dark: the effect of yellow is increased by lightening the tone”, with the opposite being true of darker blue.⁴⁰⁰ A similar distinction was made in the previous chapter with regard to intensity of tone and the spatial perception of music (brightness being an important aspect of timbre).

All discussions so far have indicated a fin-de-siècle concern with the general similarity of function and status between colour and timbre, but have failed to provide evidence of a specific correlation beyond the subjective or symbolic. After dissecting Kandinsky’s comments, above, regarding the effects of visual brightness and intensity, however, I suggest that the best place to look for audio-visual convergence is the relationship between brightness of colour and brightness of timbre. This might seem to be going against Adorno’s idea of ‘convergence’, as he was specifically opposed to the ‘tautology’ of synaesthesia. It is important to state two things in response: firstly, that the exploration of this cross-modal relationship is not strictly synaesthetic in the Kandinskian or Scriabinian sense as it does not link attempt to link a single timbre to a single subjective visual stimulus, the analytical value of which would be limited. Secondly, though quick to dismiss what ‘convergence’ is *not*, Adorno does not actually give any concrete examples of what form ‘convergence’ between the two arts might take. Limiting the scope of this chapter’s discussion to examine whether there is an easily perceived equivalence of visual and timbral brightness seems closer to the idea of convergence that Adorno describes. For Adorno, an equivalence such as this might be ‘saying the same thing twice’, but if such a connection were established in fin-de-siècle music then it will allow another angle from which to analyse the use of timbre in the music of that period. In particular, it would allow us to examine the different analytical points that arise from the moments where visual and auditory brightness not only work together (‘tautologically’), but also examine the more interesting moments when they diverge.

The following case studies aim to separate the effect of colour’s brightness from its hue—or, in music, timbre’s brightness from a tone’s spectral envelope—to see whether a functional convergence might be found in the ease with which relative brightness of colour and timbre are perceived. The

⁴⁰⁰ Ibid., 179.

first two analyses suggest that a relationship *is* present, and the third then works with this outcome to show how this relationship might affect subject position within the musical narrative of Schreker's opera *Die Spielwerk und die Prinzessin* (1913).

3.2 — Against ‘Tautology’: Brightness and/or Colour?

Dukas, Schoenberg, Schreker — 3 Brief Case Studies

The following case studies are taken from fin-de-siècle operas or, in one example, a staged music drama; in each case, visual colour is a prominent parameter. The justification for the first two case studies is that they establish an equivalence between visual and timbral *brightness* (rather than a synaesthetic equivalence of specific *colours* and *timbres*) in fin-de-siècle music. The third and final case study puts this information to use by analysing a number of moments at the end of a Schreker opera where timbral brightness and visual brightness align or diverge to alter subject position within the musical narrative.

The following three examples might appear like an unusual list when considering early twentieth-century Vienna and relationships between colour and instrumentation, both for the inclusion of Dukas, and for the exclusion of Schoenberg's ‘Farben’ from his Five Orchestral Pieces, op. 16. The three works considered here are Dukas's *Ariane et Barbe-bleu* (1907); Schoenberg's *Die glückliche Hand* (1910-13); and Schreker's opera *Die Spielwerk und die Prinzessin* (original 1913 version). All three theatre pieces make symbolic use of *visual* colour alongside their musical components (‘Farben’ does not, hence its exclusion): Dukas's six jewel-filled doors; Schoenberg's ‘colour-crescendo’; and the changing colours of Schreker's illuminated castle at the end of his opera.

The justification for including the French *Ariane* lies in its influential Viennese premiere (*Volksoper*, 2 April 1908) conducted by Alexander Zemlinsky with Schreker as chorus master, and Schoenberg, Berg and Webern in the audience (who, along with Zemlinsky, sent a telegram to Dukas on the night of the performance that, as Antony Beaumont suggests, offered words of congratulation).⁴⁰¹

⁴⁰¹ Beaumont (2010, 137-8).

Ariane et Barbe-bleu is based on the libretto of French symbolist Maurice Maeterlinck, where, in Act I, the central female protagonist, Ariadne, demands the six jewel-filled doors to be opened one by one. Each door provides an on-stage spectacle of coloured, glittering gems and jewellery, accompanied by equally spectacular orchestral textures from the pit.

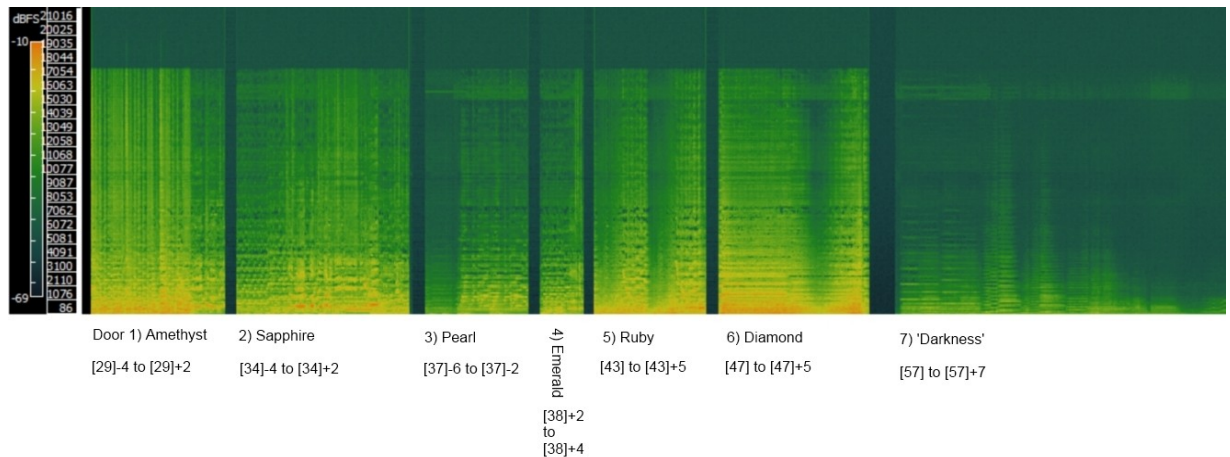


Figure 3.3 — Spectrogram of the 7 door-scenes from *Ariane et Barbe-bleu*, Act I. Each of the seven doors is represented above by short excerpts from the score, each between 5-8 bars long (see rehearsal markings above)

Figure 3.3 shows a spectrographic representation of each of the successive ‘door-openings’, with associated colour beneath, including the seventh door which opens into darkness. The horizontal axis represents time, and the vertical axis measures the frequency in hertz (where $A_4=440$ Hz). In addition, the colour represents the intensity (dBFS) of each frequency according to the scale on the left-hand side (red being most intense). Also, the frequency scale has been adjusted to give greater emphasis to the higher frequencies as I am examining timbral brightness, which is measured through the presence of upper harmonic frequencies.

The orchestral sonority for each extract is considerably different, as is the musical style. However, there is nothing inherently ‘violet’ about the music associated with the first door full of amethysts, or ‘blue’ when the second door opens, full of sapphires. It is enough that the listener associates the individual character of the music accompanying each door with the colour association made explicit through the stage action. However, functioning independently from specific orchestral style and texture, the spectrogram clearly shows each of the jewel-scenes’ music to be extremely bright (as displayed by the high concentration of upper harmonics in each). We can see this most explicitly when compared to the spectral profile of the seventh ‘dark’ door, or the darkness

presented just before the opening of the pearl door (see the sudden increase in higher spectral frequencies near the start of the section relating to door 3, rehearsal figure [37]⁶). Spectral brightness is linked to timbre, but also increases when dynamics swell (increased amplitude to upper partials) and pitch rises (higher fundamental frequency, therefore higher upper partials). On possible criticism, therefore, of the above spectrogram is that the only thing it shows is an increase in dynamics. However, this is not simply the case, as door 3 (pearl) whilst quiet, still provides a bright sound, even though all the instruments are marked *p-ppp*. I would suggest this is due to most of the instruments being used at the extreme upper end of their register with harmonics (eliminating the lower frequencies) and tremolandi (increase in high frequency ‘noise’) providing the higher partials required for ‘brightness’.

Specific colour-timbre relations therefore seem unimportant, with the emphasis being rather on bright, timbrally-spectacular sounds (by ‘spectacular’ I mean sounds whose orchestration is constructed in such a way as to be incredibly detailed, complex, and/or virtuosic by fin-de-siècle standards) as symbolic contrast to the less-bright moments when the jewellery is not on display. Here timbral brightness, rather than any specific timbral-colour correlation, serves as an obvious auditory landmark or signal that works in parallel with the opera’s vivid visual imagery.

—case study 2: Schoenberg—

Similarly, Schoenberg’s ‘colour-crescendo’ from the third scene of *Die glückliche Hand* posits colour-timbre associations that locally only correspond with one another because of their simultaneous juxtaposition. However, on a more global scale, a fundamental ‘convergence’ can be perceived throughout the ‘crescendo’ between brightness of timbre and brightness of colour. Schoenberg wrote in his 1928 Breslau lecture that, whilst the “crescendo is clothed externally in the form of an *increasing pain*”, it is only the ‘simple’ elements such as the wind machine that “lead so directly upward”, for they are “less suited to more complicated developments”. For Schoenberg, “light and also the colours, and particularly the music” do not follow such straightforward paths.⁴⁰² However, if we look directly at Schoenberg’s sketch for the colour crescendo (figure 3.4), it is easy to

⁴⁰² Schoenberg (1984, 106).

see the 'direct' path Schoenberg denies, with a general increase in brightness until we reach bright yellow and drop back to blue.⁴⁰³

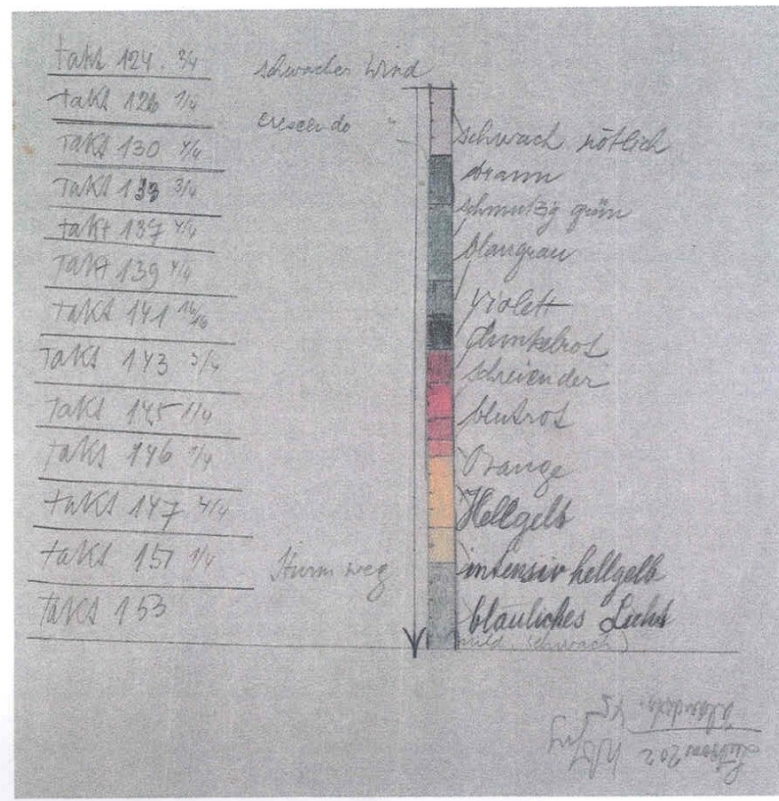


Figure 3.4 — Schoenberg's sketch for the colour-crescendo, Scene 3, *Die glückliche Hand*⁴⁰⁴

This increase in brightness is mirrored in a spectrographic representation of the passage (figure 3.5). Despite the frequent changes of timbre throughout, and Schoenberg's insistence that progression is not simply a straightforward intensification, this global change in visual and timbral *brightness* is the only relationship that is immediately perceivable.

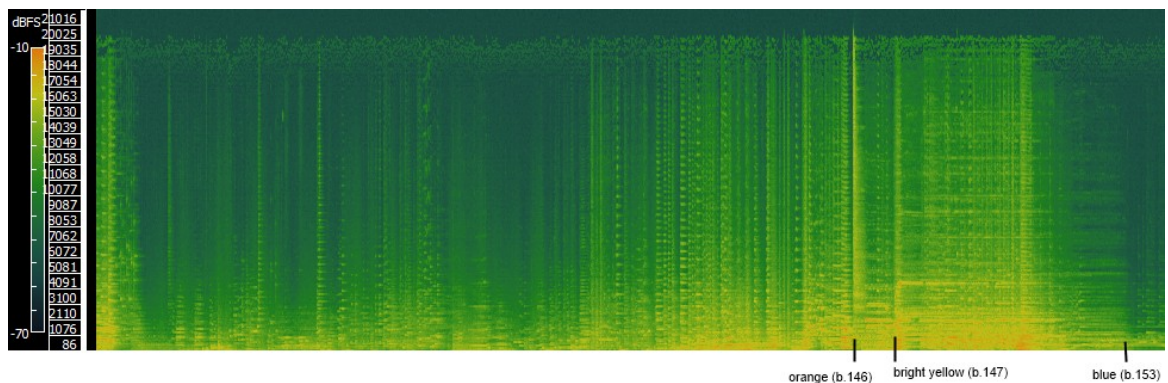


Figure 3.5 — Spectrogram of Schoenberg's 'colour-crescendo' in *Die glückliche Hand*, bars 115-155, showing a global increase in brightness

⁴⁰³ It is interesting that Schoenberg describes the 'increasing pain' of this crescendo, and that it ends on the colour Kandinsky described earlier as painful on the ears.

⁴⁰⁴ Taken from Schirn Kunsthalle Frankfurt (2002, 14).

Individual timbres change frequently throughout the passage, with no immediately perceivable correlation to the specific colours visible on stage. Here the crux of Adorno and Kandinsky's argument comes to the fore: that whilst one *might* be able to make specific subjective correlations between colour and timbre, these are only of individual value, and the significance of using both together for dramatic means lies in the relative convergence of their global role — in this case it is a global increase of intensity through increased brightness. Whilst the learnt schema of tonal pitch and harmonic relations allows for quite specific relationships to be articulated, there is no such system for colour or timbre. Even though the colour wheel is an established didactic tool in art, the exact relation and number of the colours often fluctuates (e.g. Newton's has seven, Goethe's six, Kandinsky's also six but with the blue and purple reversed). As a result, complex specific relations between colours (i.e. beyond complimentary relationships) cannot be perceived to the same degree as, say, with musical pitch. This is even more the case with timbre, as there were no theoretical underpinnings to facilitate the possibility of understanding strict complimentary or hierarchical relationships between different musical timbres. This was one of Schoenberg's reasons for exploring the idea of *Klangfarbenmelodie* in the first place — to see if such relationships were even possible. Schoenberg's colour-crescendo, with its densely chromatic harmonies, removes any sense of harmonic progression as the dominant paradigm in this passage. As a result, the parameters of timbre and colour are foregrounded, but, despite the numerous changes of colour and timbre, it is the overall increase in timbral and visual *brightness* that is immediately perceivable.

Schoenberg's use of colour and timbre in the colour-crescendo are complementary in terms of the work's global increase in brightness, but differ considerably on a local level due to the frequent changes of instrumental colour in comparison to the slower change rate of visual colour. Whilst this increase of brightness in both visual colour and timbre could initially be seen to fall under the category that Adorno described as 'tautological', this is not the case here, for the changes are not simultaneous but rather two separable parameters moving in counterpoint toward the same goal. Visual colour is not duplicating the music's movements, but working in *parallel* with it to intensify its effect. One interpretation of this relationship is that the moments in the colour-crescendo where the colour changes 'out of step' with the changes of timbre create points of disjunction that draw attention to themselves, mirroring the unstable scene on stage by creating a sense of disorientation

which results from these two elements interacting in this way. Of course, this unstable interaction is not the only signifier of instability found in Schoenberg's piece, but it certainly serves to *augment* the other parameters in regard to this particular subject position.

—case study 3: Schreker—

The final case study, the end of Schreker's opera *Die Spielwerk und die Prinzessin* (1913 version), also uses colour symbolically. However, the perceptual convergence of visual and timbral brightness found in the previous examples allows a first analytical attempt at providing a simple example of how timbre might be used to alter subject-position through a perceived correlation to the visual elements of the scene. In the final moments of the opera, the Journeyman and the Princess approach the castle at the rear of the stage, which, according to Schreker's directions, had been "bathed up to now in a white glow". The castle "increasingly takes on a blue-green hue" that "slowly changes into a gentle red, deepening during what follows". However, the music makes no equivalent change in timbral brightness. The colour change is purely visual and the lack of any close correlation in the brightness of orchestration can be seen to operate as a framing device, devised in order to keep the distant castle perceptually separate from the action happening at the front of the stage — the action at the stage front has, like the orchestration, remained constant. As with the Schoenberg example, it is the moment of disjunction between visual and auditory that encourages a certain subject-position to be adopted — in this case the music corresponds to that which is happening in the foreground, not at the rear of the stage. It is only in the closing moments, when suddenly "all the lights in the [burning] castle go out [... and] a black shadow rises out of the smoke", that a comparable difference occurs in the music. The difference is one of orchestral brightness: the more luminous timbres⁴⁰⁵ of the brass and upper percussion drop out and dynamic levels reduce until there is nothing left but church bells in the distance — the *global* effect, compared to what came before, is one of reduced timbral brightness, and comparative gloom. Now that the orchestral sound timbrally emulates the castle's change of lighting, the point of disjunction is now located between the music and the action at the *front* of the stage, which has remained unchanged, and is still well-lit.

⁴⁰⁵ Gregory Sandell's *SHARC Timbre Database* features spectral analyses of a wide range of real steady-state instrumental tones, and provides the data for the comparative assessments of instrumental brightness I make above, using graphs that compare the relative spectral centroid of each instrument in the range found in Schreker's score. For the data, documentation and basic webtools, see <http://www.timbre.ws/sharc/>.

The immediately perceivable correlations and disjunctions between the visual and auditory serves to direct the subject-position of the spectator in relation to the separate elements of the dramatic scene: as the brightness of the orchestration finally drops, the observer is now guided towards hearing the music as analogous to the castle's visual descent into darkness (through the convergence of auditory and visual brightness). The way the music changes its brightness in correlation with different parts of the visual scene potentially triggers a change in subject position that allows the focus of the listener to be moved from one part of the scene to another. Indeed, in this final scene it emphasises the separation of the two main characters (the princess and the journeyman) from the village community, which has been a recurring thread throughout the opera. In this final scene, the villagers are the ones who remain brightly illuminated in the foreground whilst the castle begins to dim. At first, then, the equally bright music is 'their' music, separate from the journeyman and princess who have moved toward the darkening distant area of the stage. Then, according to Schreker's stage instructions, the front of the stage remains illuminated and the brightness of the orchestral sound starts to diminish, consonant with the castle's descent into visual darkness. As a result, it is now the brightly illuminated villagers who are mismatched with the orchestral sound. As the focus of the music shifts away from the centre to the rear of the stage it is possible to view the entirety of this short final scene as being timbrally constructed to emphasise the sense of emotional separation between the two main characters and the crowd of villagers — a separation which had otherwise only been indicated by non-musical means (the spatial positioning of the scene plus earlier moments dialogue). Once again, this correlation between visual and auditory brightness has been used not necessarily as a *primary* indicator of a certain subject position, but rather as two parameters that can work with or against each other to *augment* that particular interpretation.

The three brief examples discussed above all attempted to use colour as a symbolic carrier, with each example juxtaposing colour and timbre to different effect. In both the Dukas and the Schoenberg this equivalence of brightness was directly perceivable and was part of the reason that it was possible for these juxtaposed timbres and colours to be linked together in fin-de-siècle audience's minds. By examining the correspondence of timbral and visual brightness in each case

study, instead of looking for the symbolic association of one colour with a particular timbre, it was possible in the final two case studies to put forward two short examples of how colour and timbre can work either in parallel or in conflict through relative changes in brightness. This is not to dismiss the symbolic colour associations in the pieces of the time, which were clearly also important, but instead to identify the parameter of brightness as the element of functional equivalence between timbre and colour. Whether or not this equivalence has a strong ecological basis is uncertain, but it is clear from these case studies that fin-de-siècle composers associated acoustically brighter timbres with visually brighter colours. This contextual grounding allows us to suggest that as fin-de-siècle listeners became aware of this ‘schema’, composers began to manipulate this relationship creatively, since it allowed listeners either to equate the audible and visual closely or view them as disjunct, making timbral brightness capable of shaping subject position. Unlike Dukas or Kandinsky, Viennese composers did not attempt to place specific emphasis on *colour-timbre* equivalence. These works are not synaesthetic responses, such as Scriabin’s *Prométhée* (1910) and the unfinished *Mysterium*, or László’s *Farblichtmusik* concerts (1925-7)—they are not ‘tautological’ in Adorno’s sense of the word—but instead use visual colour as another element in the *Gesamtkunstwerk*, functioning in parallel (or in conflict) with the timbral parameter, using *brightness* as the cross-modal link through its perceived convergence.

3.3 — Reactions in the Brain: Colour, Brightness, and Location in Music and Visual Art

This final section examines whether the perceived gross correlation between brightness of timbre and colour can be developed further. Given the fin-de-siècle tendency toward equating colour and timbre, the previous chapter’s discussion on timbre as spatial signifier, and Kandinsky’s suggestion that both colour and brightness can affect spatial perception in art, I now turn to current theory to explain and examine the role of these parameters in the (de-)construction of musical and visual perspective at the fin-de-siècle.

The preceding discussion showed brightness to be an integral and inseparable part of both visual colour and timbre. Neurobiologist Margaret Livingstone’s *Vision and Art: the biology of seeing* (2008) examines how brightness and colour interact in visual art. Cross-comparison of these

examples with this thesis's earlier remarks on the construction of the auditory scene (Bregman, chapter 2) shows where we can draw the limits of cross-modal convergence between musical and visual colour, but also proposes concepts that are potentially useful in understanding the effect of certain fin-de-siècle timbral construction.

As we shall see, Livingstone's concept of 'equiluminance' becomes important in the analytical understanding of certain fin-de-siècle timbral configurations. What follows is a brief discussion of Livingstone's ideas on spatial perception, which then leads to a parametric mapping of timbre's role in the relative spatial presentation of music. Though significant as another 'tool' in the analysis of timbre in music, this 'map' and Livingstone's 'equiluminance' are then used in a final case study that examines Schreker's opera *Der ferne Klang* and timbre's role in its spatial construction — an analytical topic that seems pertinent given the central theme of the opera is the search for a 'distant sound'.

It is important to state here that the second half of this chapter adopts a change in approach: whereas the first half (and most of the thesis so far) has focussed on culturally-conditioned elements, i.e. *learnt* schema from fin-de-siècle norms, this chapter's second part briefly examines associations that are thought to be *innate* rather than culturally conditioned. As a result, the analytical observations are still pertinent when attempting to judge potential fin-de-siècle responses, but are perhaps also more universally valid. The reason for the focus on equiluminance and timbre's role in spatial construction is that these are concepts that prove particularly pertinent when analysing fin-de-siècle works such as Franz Schreker's *Der ferne Klang*.

—'what' and 'where': colour and brightness—

Livingstone's book examines the psychobiological effects of colour in art, in which her observations are founded on the premise that colour and light (hue and brightness) are responded to, and processed by, independent sections of the brain's visual system: the 'where' and the 'what' systems. She suggests that

much of what has been written about color in art is nonsense [...] because, until recently, very little was known about how our brain processes information about color. In order to meaningfully discuss color in art—or anything else, for that matter—it is imperative to understand that color is important, even essential in some areas of visual perception and

completely irrelevant in others. Some aspects of visual perception—such as object recognition, face recognition, and, of course, color perception—depend heavily on color [the ‘what’ system], and other aspects of vision—such as motion perception, depth perception, figure/ground segregation, and perceiving positional information—are colorblind [the ‘where’ system].⁴⁰⁶

The ‘where’ and ‘what’ systems are found in biologically distinct parts of the brain, with the system responding to colour (the ‘what’ system) found only in primates, and that responding to luminosity (the ‘where’ system) being common to all mammals. The reason for this discrepancy between primates and mammals is that the ‘where’ system, relying heavily on luminosity, contains the more vital functions for survival. In addition, “it does not matter which color is used to convey the luminance signal, because the parts of [the] brain that analyze the most basic features of a scene [motion/depth perception; figure/ground segregation; positional information] are, quite literally, colorblind”.⁴⁰⁷ Thus, according to Livingstone, the reasons for considering hue and luminosity independently, when considering art, are biological.

This, of course, contradicts Kandinsky’s views on colour and motion—not that he ever intended it to be read as a scientific theory—and suggests again that he was in fact conflating the effects of brightness and colour, but, nevertheless, that the relationship between brightness and perspective was still keenly felt.

If we return once more to the three brief case studies, the idea of being ‘colourblind’ shows some perceptual equivalence: it tends not to matter *which* timbre was present, rather that there was a strong relative change in timbral brightness.

—*equiluminance*—

Having defined the two separate systems of the brain, Livingstone outlines one of the concepts that will prove useful for our fin-de-siècle analysis: the unique effects of using ‘equiluminant’ colours in art:

An object that can be seen by both subdivisions of the visual system will be perceived accurately. It will appear to move correctly or appear stable and appropriately three-

⁴⁰⁶ Livingstone (2008, 46).

⁴⁰⁷ *Ibid.*, 38.

dimensional. But if the two subdivisions are not balanced in their response to an object, it may look peculiar. For example, an object defined by [different, but] equiluminant colors can be seen by the What system but is invisible (or poorly seen) by the Where system. It may seem flat, it may seem to shift position, or it may seem to float ambiguously because there is too little luminance contrast to provide adequate information about its three-dimensional shape, its location in space, or its motion (or lack of it).⁴⁰⁸

The most distinct example Livingstone provides is Richard Anuszkiewicz's 1960 *Plus Reversed* (figure 3.6), where the equiluminance of the red and green colours used give the image an unstable quality (photocopying the image in black and white clearly shows the near equivalence in luminance). Gustav Klimt's 1907 *Poppy Field* (figure 3.7) gives a fin-de-siècle example of distorted perspective through the use of equiluminance: the distorted perspective stems from the equiluminance of the red and blue, and some of the green. The red 'poppies' are responsible for the demarcation between field and tree, and sense of receding distance through their diminishing size and the linear perspective they outline, pointing toward the most distant point in the top right of the painting. Upon the removal of hue, however, the distinct red poppies that led the eye into the distance cannot always be clearly distinguished from the green and blue dots in the rest of the scene and the painting appears more as a single flat plane; the perspective has become flattened. Looking back at the colour version, it is possible to understand that the strange sense of perspective results from this interplay between the visual confirmation of perspective provided by the red poppies (i.e. their linear arrangement pointing into the distance, and their diminishing size), and the inability of the colour-blind 'where' system to confirm any sense of perspective because it cannot separate the red flowers from the field of blue and green dots covering much of the picture. When Livingstone talks of the equiluminant effect in art, it is not necessarily as result of the colours being *exactly* the same brightness but it is enough that they are very close (see the Anuszkiewicz example). Indeed, part of the effect of the Anuszkiewicz example seems to stem from the perceptual confusion created by the fact that the *fractionally* brighter colour dominates in certain parts of the painting, and vice versa.

⁴⁰⁸ Ibid., 66.

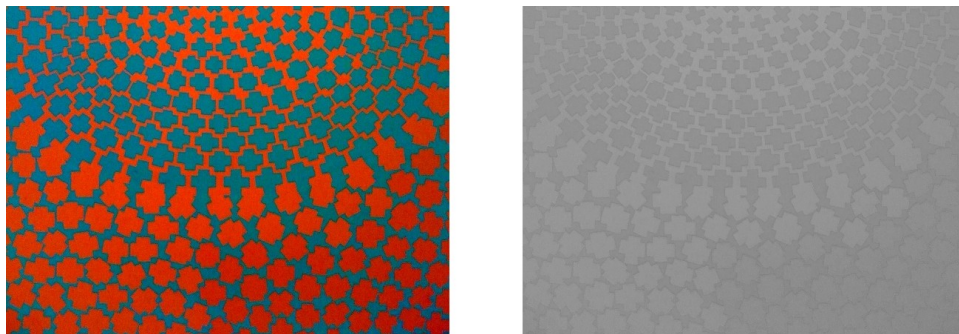


Figure 3.6 — part of Richard Anuszkiewicz's 1960 *Plus Reversed* (left); with hue removed (right)⁴⁰⁹

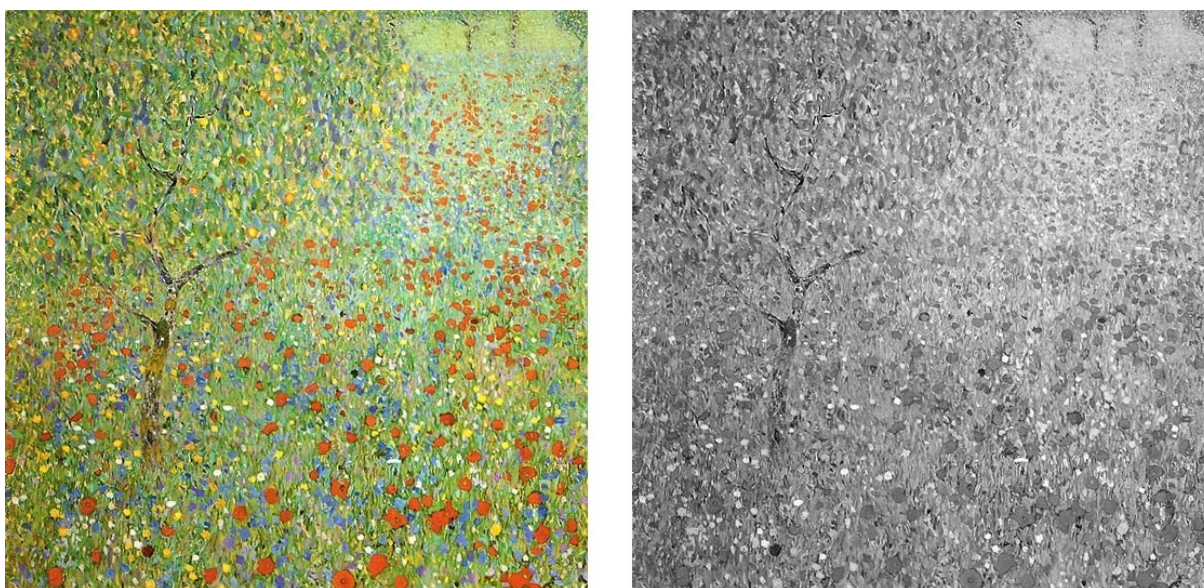


Figure 3.7 — part of Gustav Klimt's 1907 *Poppy Field* (right); with hue removed (left).
Showing equiluminant blue and red⁴¹⁰

—the auditory system: where do we locate colour and luminance in *music*?—

Given Livingstone's re-thinking of how light and colour interact visually, what can be said about musical timbre and brightness? Recent research in music cognition has established that the left temporal lobe of the brain is primarily responsible for processing the temporal-sequential properties of music (time, rhythm, metre), with the right temporal regions responsible for melodic

⁴⁰⁹ Partial scan of image taken from Livingstone (2008, 67).

⁴¹⁰ Public domain image, originally from the DVD *The Yorck Project: 10.000 Meisterwerke der Malerei* (2002), now available on Wikimedia Commons.

pitch and contour, and timbre perception.⁴¹¹ Whilst the neurological study of the brain and musical listening has made “a considerable number of advances” since the publication of *Music and the Brain* (Critchley and Henson, 1977) it still has “many remaining discrepancies”,⁴¹² one of which seems to be the lack of distinction in the literature between timbre perception and the perception of musical brightness. However, one seems clear, namely that timbre, in contradistinction to visual colour, *can* specify spatial qualities. Both Kohlmetz, et al. (2003), and Stewart, et al. (2006 & 2009), state that those who have suffered damage to the right temporal lobe “often describe music as [spatially] ‘flat’”.⁴¹³ Interestingly, with regard to fin-de-siècle criticisms of colour summarised at the start of this chapter, one of the patients suffering damage to that part of his brain not only described the flatness of the orchestra and their inability to distinguish between different timbres of musical instruments, but that in addition “music had lost its *hedonic* [my emphasis] quality”.⁴¹⁴ Sadly, this single example is not convincing enough to draw any conclusions regarding the relationship between brain function and timbral brightness in the manner that Livingstone can, and more sustained research in this area is beyond the scope of this current thesis. However, discussion of Bregman’s *Auditory Scene Analysis* (1990) in the previous chapter showed timbre to have inherent spatial properties, derived from certain ecological equivalences with the everyday acoustic environment, a model developed by Eric Clarke in his *Ways of Listening* (2005).

Timbral brightness as a specific spatial quality was not discussed. However, building upon Bregman’s ecological model one can extrapolate the following general principles: that timbre can work as a spatial signifier (through orchestral placement), as can dynamics (louder objects seem closer, and vice versa). In addition, research by Rusconi, et al. (2006), citing numerous previous studies, makes a solid case for increased pitch as perceptually occupying a higher vertical position in the listener’s phenomenological space, and vice versa — this was shown not to be the result of learnt schema (that certain pitches are ‘higher’ than others), but as an inherent perceptual response.

John Grey’s early attempt to model the three-dimensional perception of timbre is frequently cited in studies that attempt to understand timbre’s spatiality. His article ‘Multidimensional

⁴¹¹ Stewart, von Kriegstein and Dalla Bella, et al. (2009), this distinction is also supported by Kohlmetz, et al. (2003, 86).

⁴¹² Stewart, von Kriegstein and Warren, et al. (2006, 2533, 2549).

⁴¹³ Stewart, et al. (2009, p.189), see also Kohlmetz, et al. (2003, 87).

⁴¹⁴ Kohlmetz, et al. (2003, 87).

perceptual scaling of music timbres' (1977), sets out a listener's perceptual responses to specific timbres in a three-dimensional Cartesian graph. The strength of Grey's graph⁴¹⁵ is the precision with which it was able to pinpoint varied timbre's perceived location in Cartesian space and the way it demonstrated potential similarities between some timbres that appeared otherwise dissimilar. However, its weaknesses mean that it is of little analytical value for this project's construction of timbral space: firstly, the tones were synthesised individual tones, and, secondly, change in pitch and dynamics were not assessed. As has been mentioned, pitch and dynamics are important parameters in relation to a tone's timbral brightness. It is Grey's specificity that means his results are unhelpful when assessing timbre's role in a musical context with real instruments, melodies, and textures. As a result, the diagram I present below necessarily has to broaden the parameters that it works with. This means it can only indicate wider generalisations, but ensures that it can be useful in a musical context rather than abstract discussions of particular instrumental timbres.

Increased brightness is a complex result of increased dynamic levels and increasing pitch, operating through the medium of timbre. As a result, the following schematic outline of musical space has been constructed, not in a misguided attempt to pinpoint each timbre's Cartesian location, but instead to codify timbre's *relative* spatial movement within the auditory scene and to emphasise once more its emergent reliance on other musical parameters (pitch and dynamics):

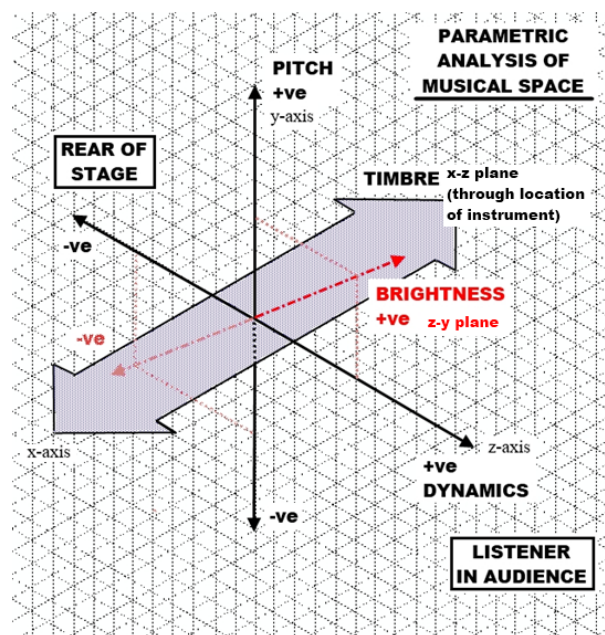


Figure 3.8 — Schematic diagram towards an understanding of musical space

⁴¹⁵ See figure 1 in Grey (1977, 1271)

The 'listener' is positioned at the front-right of the diagram, with the rear of the virtual stage in the top-left. 'Timbre' takes the form of a wide arrow across the x-z plane, and represents the physical space occupied by the orchestra on stage, hence its width (left to right; x-axis) and *depth* (front to back; z-axis). This x-z plane, then, is culturally and situationally contingent in contrast to the other more universal parameters that make up the z and y axis. Following the above discussion, increased dynamics would cause an instrumental timbre to appear phenomenologically closer on the z-axis; increased pitch, phenomenologically higher on the y-axis (and vice versa). As brightness is a result of timbre, pitch, and dynamics, the dotted red line can be constructed to represent a specific example of spatial movement through the z-y plane. Here, in this particular instance, the brightness arrow corresponds to an increase in both pitch and dynamics (a move upward, and toward the listener) and vice versa. The same increase in pitch, accompanied by a small increase in dynamics would result in a brightness-line closer to the y-axis. Similarly, a small increase in pitch but greater increase in dynamics would result in a line closer to the z-axis.

In addition, it will be noted that the path of the dotted red line does not pass through 'high-pitched, quiet sounds' or 'low-pitched, loud sound' — yet both can be 'bright'. The explanation for this is that the dotted red line forms *one* example of the global trend of brightness: increased dynamics, and pitch, increases brightness.

Let us assume that the red line passes through (0,0,0) at middle-C. If we were to consider a higher-pitched, quieter sound that was still timbrally bright (the green dot, figure 3.9), and then increased the pitch and dynamics, it would still follow the same trajectory upward toward the listener (following the green dotted line). All that would differ would be the starting point of that trajectory. Similarly, the blue dot represents a lower-pitched, louder sound (thus already brighter than the relative point on the dotted red line) but follows the same brightness trajectory if a similar increase in dynamics and pitch were to occur.

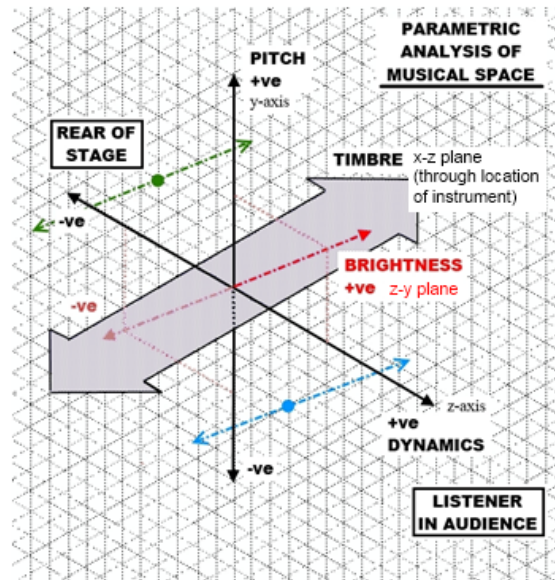


Figure 3.9 — inclusion of bright, high-pitched, quieter timbre (green dot), and bright, low-pitched, louder timbre (blue dot); showing that the global brightness trajectories are the same, but start from a different point in the y-z plane

What can be observed from this diagram is that brightness changes that result from dynamic/pitch change operate within the y-z plane of the diagram, and their perceived spatial quality can be ascribed to the combined positional qualities of dynamic and pitch changes. Left-to-right, x-axis movement is solely the domain of timbre, based as it is on the position of the sound sources (i.e. instruments) within the orchestra.

In addition, brightness can increase or decrease independently of dynamics or pitch. Purely timbral changes of brightness can occur: for example, the increased brightness of a violin tone when played near the bridge. It is unlikely that such brightness changes alone (maintaining the same pitch and dynamic level) will give rise to the perception of spatial movement, as the auditory system would not register any change in other parameters more strongly indicating movement (i.e. dynamics and pitch). However, in musical circumstances it is unlikely that such changes will be used independently of dynamic or pitch parameters, and brightness appears as the resultant by-product of these three parameters (pitch, timbre, and dynamics).

As was stated at the outset: the aim of this three-dimensional spatial model is not to claim “sound 2 came from 3ft below the stage, and 4 inches to the right”, for we know where the sound *actually* came from (even in a darkened orchestral pit, where the sound is often acousmatic, the listener can still make basic assumptions about orchestral layout). Nor do I wish to suggest that listening occurs within a strict Cartesian space. Rather, the aim is to examine the parameters

involved in the music's global features, the *relative* movement of the individual components of a musical scene: its shifting geometry, planes, and points. That this spatial model is partly based on potentially innate, or universal, principles means that it is not just suitable as a tool for the analysis of timbre's effect on fin-de-siècle spatial construction but can also be used more widely.

That music and art use different parameters to govern the perception of this spatial information does not make cross-modal comparisons irrelevant in themselves; rather, it makes them more relevant now that there is clarity as to where the similarities and differences lie. There are still spatial elements in both arts that work in a similar fashion. The 'convergence' lies in their perceived role, and the above model suggests auditory brightness—as an emergent property of timbre, dynamics, and pitch—can play with the perception of musical perspective, in a similar way to visual brightness.

3.4 — Schreker's 'ferne' Klang: timbre's role in the construction of musical distance

As one of Schreker's most popular operas *Der ferne Klang* ('The Distant Sound') has dominated much of the writing on the composer's music. This final case study refers back to the broad principles displayed in figures 3.8-9, and also the concept of 'equiluminance' in an attempt to examine timbre's role in the construction of Schreker's opera, which takes the idea of distance as a central thread. The opera's plot concerns Fritz, a composer, who leaves his lover, Grete, in search of the 'distant sound' that continues to haunt him. In the final act, however, it transpires that Grete was the mystical source of the sound all along: Fritz realizes the truth too late as he lies dying in her arms at the end of the opera.

The 'sound', as with many of Schreker's operas, works as an agent within the plot through its prominent and changing character. But, in what sense, given the discussions above, can the sound be said to be 'distant' at all? And how does Schreker's handling of this '*ferne Klang*' affect issues of changing spatial perceptions, motion, perspective and subject-position?

Appendix 3a shows the first overt appearance of the mystical distant sound, which coincides with Fritz’s description: played “by the wind, as if with an invisible hand on the strings of harp”.⁴¹⁶ It does so through a mixture of both intra-compositional disjunction (i.e., an unusual sound that contrasts with anything in the opera so far) and inter-compositional disjunction (according to the established orchestral ‘norms’ a fin-de-siècle listener would hear this sound as being noteworthy). Examining the timbrally bright orchestration reveals the following: upper strings, harp, celesta, flute, clarinet, and horn, all play in their upper registers, predominantly marked *ppp*. As such, if we consult figure 3.8, the sound is placed in the most phenomenologically ‘distant’ upper-rear quarter of our earlier diagram.

Phenomenologically the sound is perceived as ‘distant’ within the auditory-spatial field. Yet there is something else about Schreker’s sound that adds to the impression of distance. The timbres are ‘equiluminant’ — again, I use the term in the same sense that Livingstone uses it: not necessarily to indicate *exact* equivalence of brightness, but to describe multiple brightnesses that are close enough that they are difficult to distinguish between.⁴¹⁷ One of the reasons the orchestra’s sound gives the distinctive effect that it does lies in the fact that the equiluminant sounds are also subtly distinct from each other timbrally. To adopt the terminology developed in Bregman’s scene analysis, the similarity of brightness causes partial stream integration: the auditory system is unable to locate each instrumental part spatially, although it can discern that they are subtly distinct timbrally. As the arpeggiated raising-and-lowering of pitch also gives a sense of vertical movement, it is hard to pinpoint the exact location of each part as they overlap — the boundaries between each sound are blurred and indistinct. Such indistinct instrumental boundaries, combined with rhythms that cannot be played entirely accurately,⁴¹⁸ cause what on paper look like a number of repetitive ostinati to become continuously fused and segregated differently throughout the passage. From an ecological perspective, solo, muted, and flageolet timbres also add to this effect of distance through

⁴¹⁶ “Wie wenn die Wind mit Geisterhand über Harfen streicht...”

⁴¹⁷ See previous discussion, and Livingstone (2008, 66).

⁴¹⁸ For example, the 2nd and 4th violin parts at [12]. Also, a number of violin parts are labelled ‘ad lib.’.

reduction of the sound mass, and reduction of the fundamental tone frequencies, in favour of emphasising the higher partials.

The confusion in effect of the equiluminant sounds, contrasted with the distinct timbres, gives an effect of flattened perspective. By this I mean that there is auditory confusion between individual timbres that *could* signify individual spatial locations in the auditory scene, but whose spatial indicators are masked due to the perceptual blending of these individual streams (as Bregman's theory suggests) due to their equiluminance. In comparison to visual art, Schreker's distant sound displays remarkable similarity of construction to the flattened perspective of Klimt's 'telescopic' landscape painting, mentioned in the previous chapter, but also exemplified in the discussion of the paintings in figure 3.7. Klimt's use of equiluminant colours and similar textures in the different planes (the distant and not-so-distant) of the picture, facilitated the conflation of those different layers and created the confusion Anselm Wagner described when viewing these distant pictures up close — normally, objects that are visually close are clearly demarcated from their background through contrast in the depth of field. Klimt's telescopic landscape paintings break this model through their tendency to place objects close to the viewer but within a very narrow depth of field, aiming toward a single plane of perspective.

In this initial presentation, then, Schreker's *ferne Klang* does in fact appear perceptually distant, both through its timbrally distant positioning in the upper-rear quarter of the auditory scene (as set out by the parametric map in figure 3.8), and through its attempt at an equiluminant synthesis of the different instrumental timbres into a single perspective plane (all would occupy very similar positions on figure 3.8's z-axis). However, the subtle fluctuations of the individual timbral elements mean that, whilst the individual strata of Schreker's sound do begin to blend, they never completely merge but remain in a state of flux. In this instance, then, the timbral configuration of Schreker's *ferne Klang* follows the expected ecological rules: distant sounds/objects begin to fuse into a single perspective plane. From this perspective Schreker's *ferne Klang* allows the listener to empathise with Fritz's search — through this constructed subject-position one hears the sound from Fritz's perspective, both in terms of distance and also in terms of mystery through its ambiguous fluctuations. Having constructed this normalized perspective of the *ferne Klang* it is now possible to

examine how Schreker varies its timbral construction at certain key points during the opera in ways that engender different subject-positions and complement the dramatic narrative.

— *beyond the curtain, Fritz's study, act III, sc.11: "Ach nein, es läuten nur ferne Glocken"* —

The final two occurrences of the *ferne Klang* I wish to analyse take place at the end of the opera. The first takes place when Fritz, alone in his study and feeling uneasy ("Mir ist so seltsam zumut!"), hears off-stage arpeggiated celesta and piano, or, from the audience's view of the diegesis, he hears a version of the distant sound.

The image shows a page of a musical score. At the top, there is a box containing the number '76'. Below this, the name 'Fritz' is written in a stylized font, followed by '(lauschend)'. The vocal line is written on a single staff with a treble clef. The lyrics 'Mir ist so seltsam zumut!' are written below the vocal line. Below the vocal line, there are two staves for the accompaniment. The first staff is for the Celesta and Piano, and the second staff is for the Harfe (Scene). The accompaniment is marked 'sempre legato'. There are some markings on the left side of the score, including 'Cel.', 'Piano', 'u. Harf.', 'Harfe', and 'Scene'.

Figure 3.10 — *Der ferne Klang*, Act III, Sc.11, Fritz's study. Celesta and Piano "behind the scene", UE 3097 III

Piano and celesta play in unison, repeating arpeggios behind the stage, making the sound authentically distant. Again, the audience hears what Fritz hears. Here, however, when compared to the original distant sound, the incisive timbral construction (the percussive piano and celesta) requires that, for it to *sound* distant, it *must* come from behind the stage. There is no illusion of distance inherent in the sound itself. This is exemplified in the Naxos recording by Michael Halász and the Hagen Philharmonic Orchestra,⁴¹⁹ in which the celesta and piano are very prominent (and appear from the recording not to be off-stage). In this particular recording (although it must be emphasised that there are numerous other recordings where Schreker's instructions *are* followed), the sense of distance and confusion is lost, for it sounds as if Fritz is in fact sitting next to the source of the sound.

⁴¹⁹ Naxos CD 8.660074-75, (June 13, 2000).

This extract suggests that the combination of timbres chosen by Schreker does not *inherently* contain any timbral clues which suggest the sound is distant. Since the sound cannot give the illusion of being distant via timbral means it *must*, therefore, come from behind the stage of the opera house itself. Unlike the first occurrence of the *ferne Klang*, the timbral construction of this sound fails to imitate the ecological values required to suggest distance, and therefore Schreker asks for the sound to be placed *physically* off-stage so that the distance is still perceived. At this final point in the opera, when circumstances appear bleak for the dying Fritz, the situation seems to be mirrored by the more harsh, percussive timbres of the celesta and piano, but it is still dramatically important for the distant sound to remain out of Fritz's reach — it must appear as 'other', as a timbral 'outsider' intruding upon the scene. The only way this combination of harsh, but distant, timbres can be achieved is by doing what Schreker does at this point in the opera and placing the instruments off-stage, behind the auditory scene.

—closing scenes: Fritz, Grete and *ferne Klang* temporarily reunited, act III, sc.14: so near and yet so far...—

In the closing scenes of the opera, Fritz and Grete are temporarily reunited, and here the distant sound is transformed (refer to appendix 3b). Fritz, utterly overwhelmed by the sound he has been searching for these past fifteen years, talks effusively of waves, birds, bells, harps, and flaming mountains amongst other things. He hears the sound of nature; the "sounds of the Spheres" (*klängen die Sphären*). Grete believes him to be mad and comforts him, eventually with music we heard as the 'forest lullaby' in Act I.⁴²⁰

From rehearsal figure [99] we start to hear the distant celesta arpeggiations we heard in the previous example, this time surrounded by full orchestra. "Do you hear the sound?" (*Hörst du den Ton?*), asks Fritz. As Grete interjects for the first time ("*Sei doch ruhig, mein Fritz*") after [101], the arpeggiations we have come to associate with what we now know to be 'her' *ferne Klang* start to spread to the upper strings. This trend continues until at [104]¹, where Fritz exclaims "I hear the Harp[!]" (*die Harfe erklingt mir*). The orchestra climaxes with multiple arpeggiations at *fff*, covering virtually

⁴²⁰ At rehearsal [84]³ of Act I, where Grete is alone in the forest, Schreker writes "Der Wald singt ein Schummerleid".

the entire pitch range. This amplification of the *ferne Klang* moves it spatially to confront the listener — these extreme dynamics and range of pitches, and intense brightness transform the original *ferne Klang* from its distant position at the upper-rear of phenomenological space (cf. figure 3.8) into a wall, or plane, of sound ‘pushed toward’ the listener. Once again, the way Schreker constructs the music causes the listener to adopt the subject-position of Fritz as he is overwhelmed by the advancing *Klang*. The listener, like Fritz, cannot entirely comprehend the auditory scene that is now occurring: there is too much going on, too many distinct streams. From [106] the arpeggiations begin to diminish, until they seamlessly transform into Grete’s forest lullaby, and eventually die away into nothing. At this point, Fritz also dies. The experience was ‘too much’ and the distant sound returns to where it came from: even though the music is transformed (it is no longer the initial ‘*ferne Klang*’, but does provide echoes of earlier motives), it occupies the same distant phenomenological space in the auditory scene as did the *ferne Klang* (again, cf. figure 3.8). This version of the sound—toward the upper-rear of the stage and no longer confused by the equiluminant, blurry sounds Fritz sought so long to find throughout the work—eventually falls silent. The gradual silencing of this upper-distant space moves the sound closer towards an imagined distant point until, suddenly, there is a *fff* orchestral tutti. The violence of the closing full-orchestral tutti shatters this sense of an imagined distance, forcing, again, a wall of sound aggressively back toward us, from the distant to the uncomfortably close.

With this final forceful gesture, Schreker’s timbral construction of the music evokes a fundamental change in subject-position, bringing the listener back into the opera house with a crash. The ‘distant sounds’ of the preceding bars now seem even more so, masked by the tutti, and once again the listener’s subject position is one of empathy with the now-deceased Fritz’s struggle to hear the sound. As the final bars play, their timbral construction makes it temporarily impossible for the listener to hear anything else — like Fritz, we have heard the sounds from afar, but as they are masked by the full orchestra and the curtain descends, they seem unreachable.

Returning to rehearsal figure [104][†], where the amplified *ferne Klang* is heard but no longer distant, is it now possible to interpret this re-configuration as a Klimt-like ‘telescopic’ flattening of perspective? Schreker manipulates the auditory scene in a similar fashion to Klimt’s telescopic landscapes: by breaking the *expected* perspective model through the tendency to place distant objects

close to the viewer but aiming toward a single plane of perspective. When Schreker's distant sound is amplified and thrust forward in the auditory scene at rehearsal figure [104]¹¹ it occupies a position in auditory space that is perceptually closer to the audience (cf. figure 3.8). Like Klimt's landscapes, there is no longer a clear sense of perspective within the auditory scene between those musical objects that were once in the background (the elements of the distant sound) and the elements of the musical foreground (the singers and the rest of the orchestra). All the vocal-orchestral elements are pushed to the limits of saturation and, as a result, share the same forward position in the auditory scene. The effect of reduced perspective in Klimt's paintings is that each element is given equal weighting rather than following the natural hierarchy of the visual scene, which often results (as Livingstone noted) in the eye not knowing exactly where to focus. The same effect is found at this moment of complete saturation in Schreker's opera: the numerous different elements, originally placed at different depths within the auditory scene, are now given equal weighting. The distant is no longer distant, everything is equally close, and it is this that helps construct the subject-position described above: Fritz's confusion and immersion within the multiple competing elements of the distant sound, each as (in-)distinguishable as the next because the different objects now share a single plane of musical perspective in the auditory scene.

Conclusions

Following fin-de-siècle Viennese assumptions, visual colour and timbre do share some convergence of function within their respective art forms, but not just in the dismissive 'surface parameter' sense some conservative writers proposed. Given the problematic status of the 'colourless' piano reduction as an analytical tool, this chapter looked for other means to analyze the convergence between colour and timbre by suggesting that the important sub-parameter of both timbre and colour was *brightness*, and it was here that the most easily perceivable correlations lay. It moved beyond the individually subjective responses that equated particular colours and timbres, and examined the convergence of visual and musical brightness (rather than individual timbres and colours) in the three synaesthetic musical case studies — the usefulness of such comparisons lay, not only in the value of deconstructing fin-de-siècle views to discover the underlying root of such

perceived correlations, but also that, as a result of identifying the parameter responsible for such perceptions, analysis could demonstrate when these separate parameters were working with or against each other and explain why certain subject-positions were evoked.

Having established this functional convergence between visual and timbral brightness based upon fin-de-siècle usage, the final part of the chapter developed this idea further, using both current research and ideas from the previous chapter related to music's spatial construction to suggest that timbral brightness as an emergent timbral property also works as one of the signifiers of musical spatiality, distance and perspective. Though the use of current ecological theory might seem problematic for a historically-grounded timbral analysis, it was explained that these theories worked with potentially 'universal', or inherent principles (or at the very least, these more basic perceptual responses are widely perceived), and thus the analyses that followed could be used to assess timbral constructions in the fin-de-siècle and still fit this thesis's brief.

Livingstone's theory of equilumiance was adapted for musical analysis of timbral brightness alongside the parametric analysis of how the different musical parameters related to timbre and brightness affect the spatial perception of the auditory scene. The three-dimensional spatial model developed here necessarily worked with quite broad categories, otherwise (like previous timbre-space models such as Grey's) the model would not have been a useable tool in the analysis of a musical example (Grey's model, for example, dealt with single synthesised tones). The broad categories in this diagram served to emphasise timbre's role as an emergent parameter (partially a result of dynamics and pitch) and, in addition, emphasise that it was the broad *relative* changes in timbre that were analytically and perceptually important rather than aiming to describe precise single points of origin which would vary from performance to performance. Without such a diagram, the judgements that were made in the final case study would have appeared to have no theoretical basis. Again, the aim of such analysis was to examine how certain musical configurations might have encouraged the adoption of certain subject-positions from the fin-de-siècle listener. Schreker's *ferne Klang* was an obvious choice for this discussion, given the implied narrative role of the 'distant sound' within the opera. The chapter ended with a discussion of the various ways Schreker successfully (de-)constructed the effect of distance through timbral means, and the way in which his methods could be heard to share some similarities with the modernist flattening of

perspective found in the telescopic landscapes of the contemporary painter, Gustav Klimt. Through doing so the aim has been to show how, in that opera's final moments, a work's timbral construction can be used to engender a certain subject-position. In the examples discussed the work's timbral-spatial construction meant that the subject-position remained one of empathy with the opera's lead character, Fritz.

This chapter has highlighted, through recourse to fin-de-siècle concerns between art and music, the prominent and perceivable role of brightness in timbral constructions, as well as the 'emergent' character of timbre as a whole. Timbral brightness, as a distinct quality, emerges not just from the choice of instrument, but from the interaction of instrumental tessitura with pitch and dynamics. In music, it is the interaction of these parameters that give rise to what we call timbre. The ease with which timbral brightness was perceived in relation to its visual counterpart will be explored further in the next chapter, which discusses the idea of the Viennese musical night-scene in greater detail, with issues of dark and bright coming to the fore and how the contrasting interactions of auditory and visual brightness help portray the often fragmented, unstable character types found on stage.

Timbral Constructions of the Viennese Musical Night Scene: Hysteria, Dream, and Escape

This chapter proposes a case for the specific value of analyzing the timbral construction of fin-de-siècle Viennese musical night scenes. It argues that such musical night scenes—particularly operatic settings or those with text—frequently act as heightened focal points for the exploration of the individual psyche in crisis; according to Jacques Le Rider, such ‘crises of identity’ became a hallmark of the modern condition as made manifest in fin-de-siècle Viennese society and its cultural products.⁴²¹ A survey of these fin-de-siècle musical night scenes reveals a tendency toward particular timbral tropes. In addition, these nocturnal scenes often show a relative increase in timbral variety and detail in their timbral construction. Such heightened attention to the auditory is not surprising, perhaps, given the reduced visual stimuli associated with the dark night.⁴²² But what work is timbre doing in these Viennese night scenes? This chapter argues that timbre often works to augment the perception that these musical night scenes are representative of moments of subjective crisis and inward retreat or escape, and that these representations matched contemporary Viennese views of the night.

The previous chapter concluded that timbral cues were capable of signifying distance, as well indicating a perceivable correlation between relative visual and timbral brightness dependent on context. These findings are fundamental in establishing a hermeneutic framework with which to discuss the Viennese musical night, which this chapter suggests can be separated into three categories: the idealized ‘escape’ from the city bustle of the day; the hysterical or ‘mad’ subject in isolated, traumatic introspection; and the nocturnal dream. In the first category, ‘distant’ timbral cues contrast with the foregrounded scene to create the sense of separation and escape. In the final two categories—with wider cultural links to Freud’s contemporary explorations into the causes of hysteria and dream—the frame of reference is formed from established timbral tropes, symbolic of darkness or moonlight, and their distortions or transformations.

⁴²¹ *Modernity and Crises of Identity: Culture and Society in Fin-de-Siècle Vienna* (Le Rider 1993).

⁴²² Daniel Grimley makes a similar point in his discussion of Lars von Trier’s *Dancer in the Dark* in Grimley (2005, 37, 38).

To be able to analyse these works from a perspective informed by their cultural context, this chapter will examine a number of fin-de-siècle musical moments that have clear programmatic associations with the night. It will establish which timbral configurations serve as tropes for different visual elements of the fin-de-siècle musical night scene. Whilst the darkness tropes are timbrally less bright than those symbolic of the moon or moonlight, neither approaches full saturation. Furthermore, darkness tropes often operate at the lower threshold of perception. Thus, at moments of full textural saturation (of which the Viennese night scene has many), or moments of music's apparent disjunction with the visual brightness of the scene, a window for hermeneutic interpretation is created; it is from such an "awareness of surplus, excess or disjunction"⁴²³ that timbre can be used to assess subject-position. This chapter argues that these tropes were well-established in fin-de-siècle musical night scenes, and that the usage and distortion of these tropes provides additional musical exemplification of the crisis of individual identity felt so keenly at that time and place.

This chapter, from this historically-grounded viewpoint, assumes the possibility of hearing the orchestral voice, through its timbral characteristics, as having some level of similitude with the visual aspects of the night scene, and that such moments of 'naturalistic' correspondence contrast with moments of timbral excess (at odds with night's primary characteristics: obscurity, darkness, and objects on the threshold of perception). It is in these timbrally 'in-authentic' moments—moments of disjunction between the orchestral voice and visual scene—that it is necessary to ask 'what work is timbre doing?', or, in Michel Chion's words, what is the "added value" given to the visual scene through sound, through the "discrepancies between [sound] and the image".⁴²⁴ Whilst Chion's work refers specifically to the underlying relationships between sound and film, I suggest that similar principles can be found between the auditory and visual elements of musical stage works, and elements of film theory will therefore prove particularly useful during some of this chapter's discussions. Of course, much early twentieth century Viennese music became the model for the classic Hollywood soundtrack, and so the comparison is also historically and contextually valid.

⁴²³ Clarke (1999, 371).

⁴²⁴ Chion (1994, 5).

Orchestral excess and sensuality, the negative contemporary connotations of which were discussed in the first chapter, can be seen to function here as *constructive* parameters in the interpretation of such night scenes, providing analytical information not supplied by the other musical parameters. The Viennese night scene deals with timbral extremes: at one end of the scale there is the excess and saturation at odds with the *naturalistic* portrayal of the night, at the other there are moments that mimic the ecological principles of obscuration and relative reduction of timbral brightness (leading to musical objects at the threshold of perception). It is impractical—as argued in the opening chapter, and throughout this thesis—to attempt to define a quantitative timbral scale through which analysis can take place. However, by using such extremes as the basis for timbral analysis the potential for ambiguity in interpretation is reduced, for it is clear that relative differences, and by extension, *extremes*, are acutely perceivable and analyzable. For these moments, the principles of Bregman’s scene analysis, alongside a fin-de-siècle historical grounding, once again provide the tools to isolate the orchestral nocturnal tropes and their transformations—whether distorted, saturated, fragmented, obscured, or on the threshold of perception—and to analyze their affective consequences with regard to listener subject-position toward plot, narrative, and the music’s protagonists.

For many in fin-de-siècle Vienna, the night scene came to symbolize the isolated inner worlds of dream, hysteria, or idealized escape. This chapter first outlines the historically grounding for these views of the Viennese night, and then the parameters for the nocturnal orchestral tropes mentioned above, after which there are two analytical case studies which, particularly *through aspects of their timbral construction*, exemplify the contemporary concerns of the Viennese night scene: 1) Schoenberg’s *Erwartung*, op.17, and the ‘hysterical’ night; and 2) a comparison of Schreker’s *Nachtstück* interlude from *Der ferne Klang*, with the fourth song from Zemlinsky’s *Lyrical Symphony*, highlighting two contrasting examples of the nocturnal ‘dream’. Both case studies suggest inner withdrawal and Le Rider’s ‘escape’ in different ways, and emphasise the importance of timbre’s role in the effective portrayal of such states of alienated subjectivity and identity crisis—states particularly relevant to the Viennese night scene.

4.1.1. — Contemporary Viennese Ideas of Night: Escape of the Alienated Subject from ‘Life’ of the Day; Traum(a)

Ulrich decided to walk home. It was a fine night, though dark. The houses, tall and compact, formed that strange space “street” [...] The road was deserted, as if the earlier unrest had left everything in a deep slumber. [...] the commonplace buildings, peacefully starred with lighted rows of windows, laid no further spell on him.

The Man Without Qualities, Robert Musil⁴²⁵

How was the night scene portrayed by Viennese artists at the start of the twentieth century? For Musil, above, the night scene represents an idealized escape from hectic daily life. The sentiments found in Musil’s fictional portrayal of a night in central Vienna, 1913, are also present in his earlier story of city night-life, in which people “remove their uncomfortable theater clothes and thus, as it were, retrea[t] into themselves [...] forgetting the moral promptings of the day”.⁴²⁶ For Musil himself, night was the “delight of being on my own—quite alone”, distancing oneself from the pretence and social pressures of daytime city life.⁴²⁷ It is no surprise, then, that such idealized conceptions of the night scene contrast sharply with his characterization of the busy city bustle of the day:

Automobiles shot out of deep, narrow streets into the shallows of bright squares. Dark clusters of pedestrians formed cloudlike strings. [...] hundreds of noises wove themselves into a wiry texture of sounds with barbs protruding here and there [...] a man returning after years of absence would have been able to tell with his eyes shut that he was back in the Imperial Capital and Royal City of Vienna.⁴²⁸

Musil, at home in a number of cities throughout his life, continues to characterize the energy of the city by suggesting that it is not just Vienna, but that “all big cities” are made up of such “irregularity, change, forward spurts [and] collisions” that create the “boiling bubble inside a pot” of modernized city life.⁴²⁹ For Julian Johnson, this hectic portrayal of “the modern metropolis criss-crossed by transport systems”, tending toward “constant movement”, is the *antipode* to an idealized view of nature, to which the city-dweller wished to escape.⁴³⁰ Arguably, one could also interpret the idealized

⁴²⁵ Musil (1995, 706).

⁴²⁶ *Diarics: 1899-1941* (Musil 1998, 4).

⁴²⁷ *Ibid.*

⁴²⁸ Musil (1995, 3).

⁴²⁹ *Ibid.*, 4.

⁴³⁰ *Webern and the Transformation of Nature* (Johnson 1999, 18). Johnson frames his argument using the debate surrounding architectural development at the fin-de-siècle: Camillo Sitte’s city design “as if by nature” (16),

view of the night as a second antithesis to the bustle of the day, to which those from the city could escape. Such a position is exemplified in two of Schreker's night scenes. At the very beginning of Grete's nocturnal forest scene in *Der ferne Klang* (Act I, sc.7), Schreker calls for the sound of a "very distant train whistle and the rolling of its wheels" to be heard,⁴³¹ emphasizing the distance of the city bustle from the Grete's current nocturnal location. In addition, the act-III night scene interlude of Schreker's *Schatzgräber*, at the moment of daybreak, contains timbral gestures imitative of waking city life, once again including a train whistle, this time imitated by a trio of clarinets.⁴³² Each gesture is timbrally presented as if it were 'in the distance' when compared with the rest of the foregrounded orchestration, again, symbolizing the distance of daily city life from the idealized nocturnal scene. The realities of nocturnal life in a large metropolis, however, often differed from this ideal. Musil's description in this case comes from a real diary entry recorded in 1913, the year he would later set his fictional Vienna, as he lay awake at night:

Room in the boarding house: midnight; a train has arrived [...] The maidservant shows them to their room, brings in their baggage. They speak in loud voices; the brutal jolting, the giant energy in being shaken along for a whole day is still in their bones. [...] I hear the buckles on the belts around their cases, the key, the clatter of toothbrush and soap being laid on the washstand. [...] They take off their shoes. The door is locked. They wash [using] a great deal of water and are splashing lots of it over their faces, time after time. [...] They repeatedly force water into their noses, on account of the dust of the journey, and snort it out. [October 1913]⁴³³

In this alternate nocturnal scene a further quality of the metropolis is exposed: that sometimes the 'city never sleeps', that sometimes the boundaries between night and day are not clearly demarcated.⁴³⁴ The *idealized* escape to Nature, and to the Night, are similar then in that they both seek to extend the *distance* between the self and the incessant bustle of the city day, and that, in these idealized spaces, the intensely hectic energy levels find their opposite in the quiet stillness.

and Otto Wagner's contrasting view that paradise "is a building site", of which "the new city landscape would constitute a new 'nature'." (17). Johnson also cites Peter Altenberg, who grew up outside the city, for which the city was vastly un-natural ("*eine unermessliche Un-Natur*", 18). For an outline of the radical alterations to central Vienna's urban landscape that occurred in the second half of the nineteenth century, see *Fin-de-Siècle Vienna: Politics and Culture* (Schorske 1981), Chapter II: 'The Ringstrasse, its Critics, and the Birth of Urban Modernism', (24-115).

⁴³¹ "Man hört sehr entfernt einen Eisenbahnzug pfeifen und vernimmt das Rollen desselben", [72]⁵, Act I.

⁴³² The moment of 'daybreak' occurs, at b. 540 in the act III interlude, the 'train whistle' from bb. 543-6.

⁴³³ Musil (1998, 163).

⁴³⁴ Vienna's population had multiplied rapidly in the late nineteenth century (476,220 in 1857 to 2,031,420 by 1910), with many people "forced not only to let all their spare rooms, but also to rent bed space to *Bettgäher*, who enjoyed no privileges whatsoever in the apartment, not even the use of any closet space", (Janik and Toulmin 1996, 50-51). Such situations appear far removed from Musil's nocturnal ideals.

For Jacques Le Rider, this inward escape, in an attempt to find solitude, was a key feature of Viennese cultural modernity — an approach “grounded in the exaltation of individualism and subjectivity”.⁴³⁵ However, the idealized retreat inward became a contested domain for the artist: “[a]fter Nietzsche,” writes Le Rider, “individualism was felt to be an ambivalent phenomenon; turn-of-the-century attitudes oscillated between diagnosing and criticizing it as a modern cultural malady, and exalting the individual as the ultimate foundation of all true culture”;⁴³⁶ for “one man,” sings the Nietzschean Zarathustra, solitude “is the flight of the sick one; to the other, it is the flight from the sick ones”.⁴³⁷ For Le Rider, this Viennese ‘crisis of identity’ became the theme of a generation, a theme galvanized by two of its influential thinkers, Ernst Mach and Sigmund Freud.⁴³⁸

Mach put forward the thesis of the primacy of the sensations in experiencing of the world, the consequences of which are set out by Hermann Bahr:

Mach’s effect, especially on the youth, was very great at that time, and indeed, it was actually based only on a single sentence. Mach had asserted that *Das Ich ist unrettbar* [literally, “the I is unsavable”, i.e., “unreal”]. With that even the ego was overthrown and the last of the idols seemed to be smashed [...] the highest freedom won[.]⁴³⁹

This ‘freedom’ came at the expense of certainty of identity and self. Following Mach’s doctrine meant that the only thing one could trust was one’s senses. This removal of the distinction between reality and appearance resulted in what Le Rider calls the “demystification” of the certainties of identity. Without such certainties, the result was a shift toward subjective, expressionist art.⁴⁴⁰

Freud’s theories seemed equally threatening to the earlier nineteenth-century bourgeois’ sense of self. His theories promoted introspection, a “*voyage intérieur*”,⁴⁴¹ under the assumption that the causes of hysteria and dream—unstable modes of ‘consciousness’—were to be found in the repressed, unconscious part of the human psyche, which at the same time served to destabilize the security of the conscious self not subject to such self-critique. It was the role of psychoanalysis to “progressively substitut[e]” an idea “more tolerable to the subject” replacing “one which threatens its

⁴³⁵ Le Rider (1993, 30).

⁴³⁶ *Ibid.*, 32.

⁴³⁷ Nietzsche (1997, 170).

⁴³⁸ Le Rider (1993, 41-2).

⁴³⁹ Bahr, quoted in Blackmore (1972, 155).

⁴⁴⁰ Le Rider (1993, 42).

⁴⁴¹ Schorske (1981, 208).

stability”,⁴⁴² and in doing so atypical individual behaviour was altered in order to conform to socio-political norms. In reaction, it seemed to become part of art’s role to express the inner, fragmented nature of these personal experiences that Freud sought to contain.

This complex cultural background suggests a difficult view of the individual in relation to Viennese society: that the status of the individual within Viennese society had become especially fragile or complex, where solitude could bring “ecstasies” or “agonies”.⁴⁴³ As a result, the proposal of night as ‘idealized escape of the individual’ requires some modification. This view suggested an escape from the alienated subjectivity of daily city life, with the characters in various fin-de-siècle art works regaining control of their sense of self only in the solitude of night. Let us consider the large number of Viennese musical night-scenes at the beginning of the twentieth century, a cursory list of which might include:

Schoenberg: *Verklärte Nacht* (1899); *Pelleas und Melisande* (1902-3); *Erwartung* (1909); *Pierrot Lunaire* (1912); *Gurre-Lieder* (1900-11); Berg: *Wozzeck* (1914-22), Act III; Zemlinsky: *Lyric Symphony* (1922-3), songs 4 & 6; Schreker: *Nachtstück* interlude (1909) and Grete’s Act I forest scene from *Der ferne Klang*; night-scene interlude from *Der Schatzgräber* (1915-18), Act III; Mahler: Seventh Symphony (1904-5), the two *Nachtstücke*; and parts of the final song, ‘Der Abschied’, from *Das Lied von der Erde* (1908-9).

In each of these pieces ‘night’ becomes the symbolic frame within which issues particularly prevalent in fin-de-siècle Viennese society are foregrounded: dreamscapes; madness and hysteria; death; erotic couplings; and an escape to nature from the increasingly hectic and fast-paced events of daytime city life. The Viennese night scene becomes a place for the examination of the individual. However, rather than idealized scenes of the individual in control, each concerns itself with a retreat into the individual characterized by ‘agony’ or ‘ecstasy’ — in fin-de-siècle Viennese night scenes the individual merely finds themselves once again alienated from their own subjectivity but by different means. Whether it is Grete’s solitary ecstasy in the Act I forest scene of Schreker’s *Der ferne Klang*, Fritz’s ‘dream’ sequence in the Act III interlude,⁴⁴⁴ or the increasingly hysterical protagonist of Schoenberg’s *Erwartung*, each moment captures a sense of alienated subjectivity through a losing of

⁴⁴² Le Rider (1993, 42).

⁴⁴³ ‘Agonies and ecstasies of solitude’, *Ibid.*, 33-5.

⁴⁴⁴ Gösta Neuwirth (1972, 100-169) and Ulrike Kienzle (1998, 301-36) both discuss this section of Schreker’s opera in terms of stream-of-consciousness and dream process. However, neither considers work’s timbral construction, preferring instead to focus solely on motivic-harmonic relations. The status of this section as ‘dream’ will be discussed later.

self-control. The night scene in fin-de-siècle Viennese music becomes a locus for the portrayal of this ‘crisis of identity’, echoing the problems raised for the individual by Mach’s prioritization of the sensual and Freud’s theories on dream and hysteria.

Le Rider argues that the Viennese “identity crisis of the self cut off from the world” goes alongside “symptoms of a loss of reality”.⁴⁴⁵ But whose ‘reality’ is at stake here? The hysterical, ecstatic, mad, or dreaming subject can do nothing but trust their senses, following Mach’s hypothesis, and as such their hysterical or ecstatic experiences are very real to them. Nonetheless, societal norms and conventions allow for the judgement of such behaviour (hysteria, madness) to be viewed as abnormal, or in the case of Freud, pathological, and in need of remedy. Le Rider’s ‘loss of reality’, therefore, is a relative judgement made by *external* observers following socially accepted norms. This chapter argues that by the early twentieth century, certain timbral (and therefore to some extent, pitch and dynamic) configurations, through their pervasiveness in the musical literature, had become easily recognizable as tropes for darkness, moon-, or sun-light. It suggests that through this ease of recognition the distortion or transformation of such norms was particularly marked and easily discernible. In the musical night scene, when scenic and auditory cues appear disjunct from one another (i.e. when the nocturnal trope fails to correspond with what is presented on stage), the analyst must consider the subject-position they are being encouraged to adopt; the analyst can no longer assume that the protagonist views the ‘reality’ of their stage surroundings according to accepted convention. Of course, it is problematic to talk of ‘reality’, distorted or otherwise, when referring to a musician acting in a staged musical production. Claudia Gorbman takes up this issue at the start of her discussion of film music:

It is necessary here to point out the similarity, but also the slippage, among some terms that various critics use to describe the suspension of disbelief, the spectator’s psychic investment in a diegetic world presented by film: “realism”, “impression of reality”, “verisimilitude”, “illusionism”, “realistic-effect”, and “diegetic effect”. Since “realism” also designates a specific literary movement, and since film studies have given it a proliferation of meanings, I shall avoid it. The remaining terms stress not so much the “objective” verisimilitude of the film itself, but (realistic-effect, impression of reality) a *relation* between spectator and film, one that produces the level of belief or immersion in the diegesis.⁴⁴⁶

⁴⁴⁵ Le Rider (1993, 34).

⁴⁴⁶ *Unheard Melodies: Narrative Film Music* (Gorbman 1987, 45).

For Gorbman, it is the ‘suspension of disbelief’ that is important in such moments, not an exact ‘verisimilitude’ of auditory image and sound. This is also an underlying theme in Michel Chion’s *Audio-Vision*, where he states: “sound that rings true for the [film] spectator and sound that *is* true are two very different things”.⁴⁴⁷ Chion continues by putting forward the concept of ‘rendering’ in opposition to “faithful *reproduction* of the sounds that might be heard in the situation in reality”.⁴⁴⁸ These ‘rendered’ sounds, Chion argues, are heard as more “truthful, effective, and fitting” by the spectator, due to strong conventions created by “the codes of theatre, television, and cinema”, with their greater concern for *rendered* sounds, over the reproduced.⁴⁴⁹ Gorbman and Chion’s ideas can be borrowed from film theory and usefully applied to operatic scenes and staged musical drama, genres where music rarely ‘reproduces’ the sounds that would be heard in reality, but is instead heard to correlate with the visual as ‘rendered’ sound. I argue that the timbral tropes associated with darkness and moonlight are examples of such ‘rendered’ sound, partially heard as ‘believable’—as ‘fitting’ with the operatic diegesis—through the historically-grounded conventions of the fin-de-siècle operatic and musical repertoire, but also partly due to a perceivable correspondence between the timbral qualities of these tropes and the visual scene. The connection appears very strong, then, due to these tropes not only corresponding for fin-de-siècle Viennese audiences through the ‘*learned schema*’ that their music presents, but also partly through the correlation or convergence between auditory and visual brightness that the last chapter put forward. These moments of convergence between musical trope and diegesis, and contrasting moments of disjunction, could also benefit interpretively from elements of Carolyn Abbate’s theory of the ‘noumenal’ and ‘phenomenal’ music of staged performance, and these ideas will be developed further in the first case-study.⁴⁵⁰

It is at the moments of correspondence and disjunction that my analyses are located: where there is disparity between the visual and auditory scene, (re-)assessment of subject-position needs to occur. It is in the immediacy of timbre’s effect that its importance lies. This immediacy gained increased importance in the music of fin-de-siècle Vienna, especially in those works where harmonic and melodic formulae no longer maintained structural dominance, and particularly, I argue, in the

⁴⁴⁷ Chion (1994, 107).

⁴⁴⁸ *Ibid.*, 224.

⁴⁴⁹ *Ibid.*, 109, 108.

⁴⁵⁰ See discussion in chapter 2, as well as later in this chapter.

musical night scene with its conventionalized use of timbral tropes, and increased emphasis on timbral variety.

The Viennese musical night scene with its clear use of symbolic tropes for moonlight and darkness (which allow their distortions or transformations to be equally clear) provides fertile ground for analysis of the timbral factors involved in the musical portrayal of madness, dream, the loss of subjective control, and escape (through their correspondence/disjunction with the visual diegesis). First, these timbral tropes must be defined according to fin-de-siècle cultural conventions, and these then function as the basis for more detailed hermeneutic accounts of particular musical moments, moments indicative of the loss of subjective control—in ‘agony’ or ‘ecstasy’—within the Viennese night scene.

4.1.2. — Nocturnal Conventions: Timbre’s Role in the Musical Night Scene; ‘Darkness’ and ‘Moonlight’

[T]he orchestra drop out entirely—real Mélisande in a real tower would have to sing unaccompanied, unless she had her own mandolin and stopped combing her hair to play it [...] this hyperrealism—the long orchestral silence [calls] into question [...] the very plausibility of the orchestral voice in opera. How did that orchestra suddenly get to a forest in the middle of the night?⁴⁵¹

Of course, Carolyn Abbate’s provocation is rhetorical — one is *not* surprised to hear the sound of the orchestra when attending an operatic performance. Such moments of ‘hyperrealism’, as Abbate calls them, are rare (this is her point), and at all other times the operatic listener is happy to participate in opera’s “fundamental illusion”: that drama and music are to be heard in close synthesis with one another,⁴⁵² much like Chion’s notion of ‘added value’ in film music. It is this distinction that distinguishes opera from spoken drama with accompanying music. As a result of this approach to the operatic genre, the listener correlates certain musical gestures or tropes with certain on-stage acts, physical gestures, or objects. Moonlight and darkness create no sound, yet certain orchestral tropes are commonly associated with them in the Viennese musical literature of the early twentieth century. Such learnt associations are not only historically grounded, but are partly built upon the convergence of auditory and visual brightness discussed in chapter 3.

⁴⁵¹ Abbate (2001, 175).

⁴⁵² Abbate (1991, 119).

The task of establishing the timbral parameters by which musical darkness and moonlight were understood will necessarily involve some simplification at this stage. At the outset it should be mentioned that the aim of such a task is the setting of manageable boundaries, not striving for single definitions, and to assess the possible features of a 'neutral' form from which transformations can later be said to deviate. For if one examines the moments representative of a single trope, one sees, both within a single piece and in the comparison of different pieces, that as well as strong similarities of timbral configuration, there are often differences. Here I refer back to the idea of 'metameric' colours, highlighted by Bregman,⁴⁵³ colours "that look identical despite the fact that their spectral content is different".⁴⁵⁴ Making an analogy to timbre, Bregman suggests that it is "not so important" that two such timbres "sounded exactly alike", but rather that their "grouping tendencies" are similar.⁴⁵⁵ Bregman's relaxation of the strict definition of 'metameric' links closely to my aims here — it would be untenable to suggest a single definition of each nocturnal trope, or only include those that sounded identical. For example, whilst comparison of the opening of songs 1 and 18 from Schoenberg's *Pierrot Lunaire* ('Moondrunk' and 'Moonfleck') shows a small number of surface differences in their portrayal of moonlight (addition of clarinet; some difference in rhythmic gesture, and pitch content), a greater number of similarities is apparent (flute/piccolo, violin, cello, piano; similar tessitura of instruments; similar overall timbral brightness; similar level of rhythmic energy). It is not so important that the timbral configurations sound exactly alike, or are composed of exactly the same instruments, in exactly the same ranges, but rather that the tendencies of those instruments within their groupings function in a similar way. By enlarging such definitional boundaries one can include slightly different sounds with similar essential properties from differing genres, styles and orchestral configurations. The job of analysis then becomes that of assessing the effect of such tropes—and their transformations—*within* each individual piece.

Considering the focus is on *brightness*, it might be suggested that we could return to spectrographic analysis as a useful tool in assessing the boundaries of these bright and dark sounds. Firstly, I would respond by saying that in these case studies such tropes are not just about relative timbral 'brightness' or 'darkness' but also about the idea of saturation, strain and their opposite

⁴⁵³ See Bregman (1990, 122ff., 647-8).

⁴⁵⁴ *Ibid.*, 647.

⁴⁵⁵ *Ibid.*, 648.

extremes — they are about timbre as an *emergent* property. The visual night scene is concerned with relative absence of light and with ideas of obscuration, and even with moonlit scenes there is still a distinct lack of saturation (compared to daylight).

In musical night scenes which attempt naturalistic portrayal through an approximate correlation of the visual and the auditory, ‘dark’ sounds often take the form of long, single sustained tones in the lowest tessituras of the double bass, cello, harp, contrabassoon, bass clarinet, and, on occasion, piano and tuba. Played in their lowest dynamic range, such tones are on the threshold of perception; anything less and there would fail to be any sound at all. Such sounds are not unique to *nocturnal* darkness, but moments of darkness more generally. Context dependent, the most conventional darkness tropes also rely on their lack of rhythmic and acoustic energy as symbolic of the idealized image of the night as escape from daily noise and bustle. ‘Moonlight’ as a timbral trope is harder to define, but its essential qualities again point to relative brightness, tessitura and saturation. Whilst relative brightness tends to be greater, moonlight tropes still do not approach full saturation, an effect reserved for the symbolic portrayal of daylight. Such distinctions in both dark and moonlight tropes—key attributes in the musical night scene—cannot be picked up using spectrographic analysis as a tool as it only focuses on relative brightness.

Secondly, I would respond that whilst spectrographic analyses *are* useful in certain situations (earlier on in chapter 3, for example), for the analyses taking place here the specific difficulty lies in the lack of distinction between the *origin* of each sound. Spectrograms only deliver a unified image of the entire sound scene, and unless it is a very clear auditory example—as found in the previous chapter—it is difficult for the analyst to deconstruct this unified image and attribute specific elements to specific instruments. In chapter 3, the discussion focussed on attempting to analyse whether there was an underlying correlation between auditory and visual brightness. In that instance spectrographic analysis functioned successfully because the case studies dealt with distinct overall changes in brightness. In the present instance the ability to deconstruct the texture of the sound scene to its individual components is of utmost importance. Additionally, whilst a spectrogram can show that a moment is acoustically ‘dark’ or that it contains bright sounds (useful in the previous chapter), it cannot distinguish between sounds of opposing brightness (i.e. one dark, one bright) sounded simultaneously. Spectrographic analysis allowed the previous chapter to

demonstrate a fundamental convergence between timbral and visual brightness, but now we must take that finding and adopt a different analytical strategy based on the correlation those spectrograms displayed.

Part of the analytical process, then, becomes the isolation of individual objects as signals—the orchestral tropes mentioned above. In the case of the musical night scene, our analytical focus is placed upon the timbral tropes symbolic of moonlight and darkness, and their musical transformations. Isolating these timbral objects within the musical texture would appear to create similar analytical problems presented by the initial segmentation process of pitch-class set theory, both relying to some degree on the analyst's subjective response to particular musical stimuli or events.⁴⁵⁶ However, Bregman's grouping principles, and the set of parameters defining the moonlight or darkness tropes outlined below, help minimize this degree of subjective variation. The two tropes outlined below are not, of course, unique to fin-de-siècle Viennese music, with further examples being found in the wider Austro-Germanic and contemporary French musical repertoire; however, as stated at the outset, it is not the aim to analyze these tropes as particularly 'Viennese' (although they *do* come from the Viennese musical literature), but rather to suggest that fin-de-siècle Viennese audiences would have been familiar with the contextual associations of these timbral tropes through their consistent usage in the music of the time. In one sense there is nothing intrinsically 'nocturnal' about these tropes, other than the inherent similitude of acoustic and visual brightness, but the consistent use of these tropes within the Viennese night scene, and their programmatic associations, means that attention to the convergence of audio-visual brightness can become an interpretive tool that responds to their specific cultural context. After these tropes have been established, the two analyses that follow examine the way these 'norms' are used, and in some cases distorted, to portray particularly fin-de-siècle Viennese concerns within the musical night scene.

⁴⁵⁶ A detailed discussion of these issues can be found in Nicholas Cook's *A Guide to Musical Analysis* (Cook, 1987, 146ff.).

Table 4.1 lists a number of musical examples from fin-de-siècle Viennese musical night scenes, moments that can be heard to exemplify archetypal tropes of nocturnal dark stillness. The qualities of such sounds have already been mentioned above. They are sounds on the *threshold* of silence: low in the extremes of each instrument’s tessitura and dynamic range; lacking in rhythmic and acoustic energy. As a result, the timbral properties that emerge from such characteristics are all relatively low in brightness — confirming, as in the previous chapter, a perceived parallel between lack of visual brightness and relative lack of timbral brightness. They are also harmonically static, tending toward unison or sustained dense clusters that could be equated to Adorno’s category of suspension.

For example, the sixth song of Zemlinsky’s *Lyric Symphony* opens with the cellos and double basses playing a sustained E, *pianissimo*, at the lower end of their ranges (the *lowest* note for a double bass without extension).⁴⁵⁷ A similar example, ‘metameric’ in the broad sense outlined above, can be found in *Verklärte Nacht* (viola and cello in the opening bars). These and further examples are listed below, divided according to the predominant timbre: lower strings; and rarer examples using harp, or brass and woodwind:

Table 4.1 — Examples of Archetypal Tropes of Timbral Darkness in Viennese Nocturnal Scenes

	Composer	Piece	Location, and any Additional Description
Predominantly Lower Strings (Often Unison)			
1	Mahler	<i>Das Lied von der Erde</i> , 6. ‘Der Abschied’	Reh.[3] ¹ , “ <i>The sun departs...</i> ”. {muted cellos alone, <i>pp</i> ; cf. relatively greater brightness of opening bars with tam-tam and <i>sfpp</i> contrabassoon}
2		Seventh Symphony, 2. ‘Nachtmusik’	R[108]. {double bass and cello pedal, <i>pp</i> , cf. to flute, clarinet, horn above}
3	Zemlinsky	<i>Lyric Symphony</i> , 6. ‘Vollende den..’	Opening. {cellos and double basses, <i>pp</i> }
4	Schoenberg	<i>Verklärte Nacht</i>	Opening. {cello and viola, <i>pp</i> }
5		<i>Erwartung</i> , Scene 2	bb.53-6. {double bass and bass clarinet, <i>pp</i> ; examining of the path in the ‘inky blackness’}.
6		<i>Pierrot Lunaire</i> , 8. ‘Nacht’	Opening bars. {cello, bass clarinet, and lowest register of piano, <i>pp</i> ; rhythmically, not entirely static}
7	Berg	<i>Wozzeck</i> , Act III, Scene 2	bb.71-3; 75-6; 78-9. {double bass, in lowest range, contrasted with ‘moonlight’ tropes (see table 4.2); bassoon and contrabassoon in b.78. Aside from b.79 (double bass alone, <i>pp</i>), the other references are clearly distortions of the ‘dark’ trope, containing dramatic crescendos}

⁴⁵⁷ It is worth noting that, following the establishment of this ‘dark’ threshold trope, there is a particularly prominent rising clarinet figure, marked *fff*. The rising arpeggio is in hemidemisemi-quavers and played by 3 clarinets in unison. The result is one of intrusion and distortion (through the acoustic beating that is unavoidable with more than one clarinet playing in unison at this volume). This intrusion, or timbral breakthrough, creates a mismatch with the *visual* scene and therefore results in a moment of narrative disjunction requiring audience interpretation.

Table 4.1 (continued)

	Composer	Piece	Location, and any Additional Description
Versions with Low Brass and/or Woodwind (Rare)			
8	Schoenberg	<i>Gurre-Lieder</i> , Part III	R[72] ⁺⁵ -[74], after Waldemar's 'men' have returned to the grave at the night's ending {solo BB ^b tuba pedal, <i>pppp</i> , lowest register}
9	Zemlinsky	<i>Lyric Symphony</i> , 4. 'Sprich zu mir...'	R[67] ⁺¹ ff., just before "The night is dark...". {tuba, contrabassoon, <i>pp</i> , in lowest register; joined by double bass and <i>ppp</i> bass drum roll at [67] ⁺³ }
Including Lowest Range of Harp			
10	Mahler	<i>Das Lied von der Erde</i> , 6. 'Der Abschied'	R[22]-3 ff., after "The world falls asleep". {sustained double bass, <i>pp</i> ; harp, slow quavers, alternating fourths in bass register, first <i>p</i> , then <i>pp</i> }
11	Berg	<i>Wozzeck</i> , Act III, Scene 4	b.319, nocturnal stillness after death of Wozzeck. {harp in lowest register, B ^{b1} -D ^{b1} , <i>p</i> }
12		Scene 2	bb.106-8, after death of Marie, nocturnal stillness. {harp in lowest register, octaves, again m3: D ¹ -F ¹ , <i>pp</i> dim. to <i>pppp</i> ; contrast to 'moonlight' tropes (see table 4.2)}
13	Schoenberg	<i>Erwartung</i> , Scene 1	bb.4-5, "...one cannot see the path...". {harp, <i>p</i> , slow alternating m3; muted double bass tremolandi, <i>pp</i> ; both in lowest register}
14		Scene 2	bb.67-8, "Is anyone there? ... No...". {harp solo, <i>ppp</i> }
15		Scene 4	bb.418 ff.. "It is dark...". {double basses, sustained harmonics, <i>pp</i> ; harp, slow quaver triplets, <i>ppp</i> , absolute lowest register ('where possible an octave lower')}

The reason for the relative rarity of archetypal examples involving lower brass, woodwind or harp, might lie in the fact that the spectral brightness of most of those instruments is greater than the strings, even in their lower tessituras and at lower dynamic levels (for example, bass trombone and contrabassoon). A notable exception is the tuba, which has a much lower spectral centroid than those mentioned above, sounding 'less bright' — this is especially true when playing in its lower tessitura, and at lower dynamic levels. Another exception is the bass clarinet at its lowest dynamic level. As a counter-example to these, the bass-trombone's spectral centroid *increases* not only at the upper end of its pitch range, but also as it approaches the lower end of its tessitura.⁴⁵⁸ The harp adds brightness by manner of its attack (diminishing with lower dynamic levels); but these upper harmonics quickly decay. Aside from some exceptions, then, the orchestral group most easily capable of producing timbral dark sounds in their lowest register, at the lowest dynamic levels, is the lower strings.

The example from Schoenberg's *Gurre-Lieder* (table 4.1, ex. 8) unusually uses low brass to represent darkness, but can be seen to exploit the unique timbral properties of the tuba. At this point

⁴⁵⁸ Information taken from Gregory Sandell's *SHARC Timbre Database*. The database features spectral analyses of a wide range of real steady state continuously-excited instrument tones and some impulsively-excited ones. The individual tones of each instrument are analysed across the pitch spectrum. Using the basic webtools provided, the data can be displayed in graphic format and parameters compared (in this case, spectral centroid of bass trombone, contrabassoon, and BB^b tuba). For more information, see <http://www.timbre.ws/sharc/files/README.txt>, and <http://gregsandell.blogspot.com/2007/10/sharc-timbre-dataset-v-20-xml-format.html>. For the data and basic webtools, see <http://www.timbre.ws/sharc/>.

in the music, King Waldemar's men have returned to their graves as the night approaches its end. Schoenberg asks for a sustained pedal note, over 13 slow bars, marked *pppp*, at the bottom of the solo BB^b tuba's range (F¹). "If it is not possible for the tuba alone to sustain [*auszuhalten*] a uniform *pp* over so many bars", writes Schoenberg, then "only here are the contrabassoon and bass-trombone to play along".⁴⁵⁹ That this pitch should ideally be played on the tuba alone could be linked to the brightness of the tone, as an increase in timbral brightness is clearly audible when the contrabassoon or bass trombone momentarily take over to allow the tuba player to breathe.⁴⁶⁰ In addition, Schoenberg comments that if it is not possible for the tuba player to play such low tones, the other instruments can again join in, but stipulates that it must be "at least in the deepest tessitura".⁴⁶¹ The placing of these directions at this imagined nocturnally dark low-point suggests an awareness of the timbral properties of the instruments and their visual correlation. Schoenberg's comments can be seen to outline the same two factors this section has put forward as of paramount importance in defining musical darkness as orchestral trope on the threshold of silence: 1) the importance of placing the pitch in the lowest tessitura of the instrument; and 2) the relative reduction of timbral brightness to its minimal level. In *Gurre-Lieder*, Schoenberg had virtually every instrumental combination at his disposal; the explicit choice of the BB^b tuba—with its relatively low timbral brightness—at this point of darkness is significant, because at such moments of timbral minimalism the slightest increase in brightness is extremely noticeable.

Also worth noting from the table above is that Schreker's music is conspicuous in its absence. In both the *Nachtstück*, and Act III interlude from *Der Schatzgräber*, no such tropes are found. This is not to say that Schreker *never* resorts to such tropes — one might cite the discussion that takes place, at night, in Grete's family home (Act I, beginning of sc.4, *Der ferne Klang*); or the minstrel Elis's brief imitation of the moon and the dark of night in his song (Act I, end of sc.6, *Der Schatzgräber*). Instead, it highlights that Schreker does not use such tropes in his extended orchestral night scenes. Rather than using the extended third-act orchestral interludes of *ferne Klang* and *Schatzgräber* to portray a typical scene in the dark of night, what we are instead presented with is a musical dreamscape on the

⁴⁵⁹ "Die Kontrafagott und die Kontrabaß-Posaune haben hier nur dann mitzuspielen, wenn es der Kontrabaß-Tuba allein nicht möglich ist, ein gleichmäßiges *pp* durch so viele Takte auszuhalten". Footnote, *Gurre-Lieder* Score (UE 6300, p.161).

⁴⁶⁰ This change in brightness is clear on the most recent recording by Esa-Pekka Salonen: 'Schoenberg: *Gurrelieder*'. Esa-Pekka Salonen, Philharmonia Orchestra (Signum Records, SIGCD173, Sept. 2009).

⁴⁶¹ "[...]jedenfalls die tiefste Lage". (UE 6300, p.161).

one hand, and on the other, an overtly erotic nocturnal encounter. Both take place at night, but are distanced from its darkness. The fact that Schreker was familiar with the tropes discussed, but avoided their use in these night scenes suggests that he was less concerned with portraying the physical nature of the night scene, but rather with the sense of escape such a setting provided — the sense of escape Musil highlighted in his idealized night scenes.

It must be stressed that the examples listed in table 4.1 are relatively rare, partly due to the nature of the material itself (its static qualities, devoid of melodic or developmental interest), and partly because they often appear as *distorted* or transformed versions according to the musical narrative. In highlighting a number of ‘normative’ examples, chosen through the parameters outlined above, the reader has a clearer sense of the historically-grounded conventions governing the orchestral trope of darkness, conventions from which I suggest distortions can be said to have deviated.

—*second nocturnal trope: moonlight*—

The timbral tropes associated with ‘moonlight’ are somewhat harder to define, for, as mentioned above, moonlight tropes are not merely bright sounds contrasting with their timbrally dark opposites. If this were the case, where would this leave the fully-saturated orchestral textures, such as those portraying the sunrise at the end of Schoenberg’s *Gurre-Lieder*? Brightness without full saturation is therefore a key attribute in the portrayal of moonlight, and its relative weakness.

Table 4.2 lists examples of moonlight tropes found in Viennese musical night scenes, from which two clear categories can be seen to emerge. The first mainly involves sustained high strings in their upper tessitura, at diminished dynamic levels, often muted or playing harmonics. Such tropes occur when the scene is illuminated by diffuse moonlight, its soft glow bathing the surroundings. The second type tends to occur at moments when the protagonist refers to a distinct ‘beam of moonlight’, or to the moon itself as an object of contemplation. Here the sounds are much more distinct, as short contained musical gestures. They often occur on the celesta, piano, flute, or harp, played in their upper-mid registers, at moderate or quiet dynamics — creating a bright sound, but one that is not saturated.

Both types of ‘moonlight’ avoid saturation in different ways. The first uses upper registral extremes, but only on instruments where such extremes can be produced without *strain*, at low dynamic levels, and with a thinness of tone (by which I mean a relatively reduced prominence of the tone’s pitch quality). Such thinness allows for other musical events to be heard clearly through this *Klangfläche*, implying transparency. The second trope maintains its lack of saturation through low-level dynamics and by avoiding the upper extremes of the instruments’ tessituras. In addition, the instruments used for this second trope (with the exception of the flute) each have a decisive attack, which then quickly decays leaving a much reduced steady-state portion of the tone. Musically, the second category can be broadly defined through a gentle incisiveness, a piercing of the musical texture (in contrast to the first moonlight trope). The flute is less common here, but perhaps its use in the second moonlight trope relates to its incisive, bright timbre, and that it also has the ability create a thinness of tone at its lower dynamic levels. This is the quality described in the Strauss-Berlioz instrumental treatise in comparison to the tones of the clarinet which “would have been too strong”, for even the clarinet’s “softest tones cannot be reduced to the weak and veiled sound” of the flute in its mid-register.⁴⁶² Both *moonlight* tropes have to avoid saturation; they do so through the choice of instruments and use of their mid-register at low dynamic levels.

Table 4.2 — Examples of Archetypal Tropes of Timbral Moonlight in Viennese Nocturnal Scenes

	<i>Composer</i>	<i>Piece</i>	<i>Location, and any Additional Description</i>	
1 st Trope	‘Diffuse Moonlight’ — Predominantly Sustained Strings in Upper Tessitura (muted/harmonics)			
	1	Zemlinsky	<i>Lyric Symphony</i> , 4. ‘Sprich zu mir...’	R[67] ¹ ff., compare ex.8, table 4.1. {upper strings in upper tessitura, <i>pp</i> , muted; also contains example of celesta and harp used in upper mid-range (could be in second part of table)}
	2	Schoenberg	<i>Verklärte Nacht</i>	Ending, particularly 5 bars from the end. “Two people walk through the high, bright night” {sustained strings, <i>pp</i> , harmonics in upper tessitura}
	3		<i>Erwartung</i> , Scene 1	bb.1-2. ‘The edge of a forest. Roads and fields are lit by the moon; the forest ... dark.’ {b.2, violins in upper register, <i>pp</i> , harmonics; b.1 flute and celesta, <i>p</i> (could be in second part of table)}.
	4	Berg	<i>Wozzeck</i> , Act III, Scene 2	bb.107-8. {upper tessitura violins, muted harmonics, <i>pp</i> ; also sustained flutes, <i>pp</i> , in mid-range}
2 nd Trope	‘Moon as Object’, or ‘Shaft of Moonlight under Gaze’ — Upper Mid-Range; Predominantly Celesta, Piano, Harp, Flute			
	5	Schoenberg	<i>Erwartung</i> , Scene 1	bb.16-17. “...the moon was so bright earlier”. {harp and celesta, upper mid-range, <i>p</i> ; also solo violin, extreme upper tessitura, <i>ppp</i> (could be in first part of table)}
	6		<i>Pierrot Lunaire</i> , 1. ‘Mondestrunken’	Opening. {piano, flute, pizz. violin, all <i>pp</i> and upper mid-register}
	7		18. ‘Der Mondfleck’	Opening. {piano, clarinet, violin, piccolo, <i>pp</i> , in upper mid-register}
	8	Berg	<i>Wozzeck</i> , Act III, Scene 2	bb.71-2, just before ‘it darkens’. {harp, celesta, piccolo, flute arpeggiations, mainly in upper mid-register and lowest dynamics}

⁴⁶² *Treatise on Instrumentation*, Hector Berlioz and Richard Strauss, fp. 1904 in Berlioz (1991, 228).

Such criteria support the analysis of a song such as Schoenberg's 'Der kranke Mond' ('The sick moon', *Pierrot Lunaire*) on the basis of its timbral characteristics. Compared to 'Mondestrunken' and 'Der Mondfleck' (exx. 6 and 7, table 4.1), the 'sickness' of the moon in the seventh song is portrayed not only by a reduction in the number of instruments, and a draining of rhythmic vitality, but also by limiting the range of the solo flute predominantly to its lower register. The three occasions where the flute does manage to rise into its upper register, it follows a pattern of sudden uprising then gradual descent. In terms of gesture and energy, the anthropomorphized 'sick' moon (represented by the single flute) of Schoenberg's song is heard to strive upward toward its 'normal' range, but find its energy expended, requiring its descent to the lower, weaker range. Analytical observations should not rely on pitch as an independent, autonomous parameter, but upon the relationship of pitch within the known range of an instrument. To recognize that the flute is not playing in its 'normal' range, in a piece entitled the 'sick' moon, gives a musical parameter to which we can attribute this distortion of the moonlight trope. Notions of distortion require norms and extremes; extremes cannot be evaluated without boundaries. Aside from knowing that the flute's lower boundary is middle-C, it is timbrally audible that the flute is in a weaker part of its range. In addition, it can be seen to fall outside of the norms outlined above in table 4.2. Marked *pppp* as well as *molto dim.*, the sustained C# in bars 15-16 of 'Der kranke Mond' verges on the sound of a pitch-less breath. On the flute, the dynamic level and pitch class could hardly be any lower without the sound ceasing to be playable. It is on the threshold of silence, which in this context would symbolize darkness; in this piece, then, the sick moon struggles to fulfil its normative function.

Similar ideas are advanced in Hugo Riemann's *How Do We Hear Music?* (1888),⁴⁶³ where one finds a contemporary German voice concerned with the detailed deconstruction of parameters responsible for the perception of musical brightness, and particularly concern with timbre and tessitura.⁴⁶⁴ After dismissing Newton's analogy between seven colours and seven tones, and the

⁴⁶³ *Wie hören wir Musik?* (Leipzig, 1888), trans. by Rev. H. Bewerunge as *Catechism of Musical Aesthetics* (London, 1895).

⁴⁶⁴ Riemann states in the introduction that his short essay sets out to assess the changes occurring within orchestral music, and to find a "third way" between "Hanslick's system of formalism" and Friedrich von Hausegger's *Music as Expression* ('*Die Musik als Ausdruck*', Vienna, 1885). Von Hausegger published *Die Musik als Ausdruck* as a response to Hanslick's earlier treatise. In it, Hausegger draws on Darwin's *The Expression of Emotions in Man and Animals* (1872), and demonstrating how symptoms of certain emotions—heartbeat, changes in breathing, bodily movement, etc.—can have equivalent musical form, with which listeners empathise. See *Friedrich von Hausegger's Aesthetics of Musical Expression*, in Kappel (2010).

“many [other] attempts [...] to draw parallel between tones and colours”,⁴⁶⁵ Riemann suggests that Newton should have extended his view “beyond the octave, and left out of consideration the scale of seven colour tones, which, after all, is only a fiction” and “recognised a different analogy [...], one in which the whole range of tone, from the lowest depth to the loftiest heights, comes in comparison with the spectrum” which “in the lowest depths vanishes into black and in the highest ascends into white”.⁴⁶⁶ So far, it would seem that, for Riemann, pitch is solely responsible for perceived brightness of tone, speaking of a “general usage of language” that refers to tones with “slower vibrations and longer sound-waves, [as] *low* and *dark*”, and vice versa.⁴⁶⁷

However, he continues by challenging such ‘general usage’, suggesting that “we have explained only a part of the effect of a single tone”; dynamics and timbre have yet to be mentioned.⁴⁶⁸ Strong dynamics give increased “massiveness” at the lower end of the pitch spectrum, and an “intensity” (sometimes of an “intolerable” level) at the upper end.⁴⁶⁹ It follows then that the converse can also be seen to be true, that, via a reduction in dynamic levels a note becomes less present, or bright.

Riemann correctly states that pitch and dynamics are related to brightness (again, see previous chapter), but in addition he emphasises timbre’s importance: whether a middle C

is sounded by a ‘cello or a violin, a bassoon or a flute [etc.], makes a great deal of difference in its aesthetic effect. Produced by a ‘cello, bassoon, or a Tenor or Bass voice, it will sound high and clear; produced by a violin, flute, or female voice it will sound low and dark. Moreover, it will sound differently again according [to how] it is produced [...]’⁴⁷⁰

Here the suggestion is that every instrument can be relatively dark or bright, but that certain instruments are naturally better suited to producing dark, or light, sounds according to where the pitch falls in their tessitura. One can perceive (either from experience, or the inherent ‘strained’ quality of a tone) whether or not a tone lies in an instrument’s ‘comfortable’ range; tones placed in the upper extremities of an instrument’s range generally produce greater strain and acoustic brightness.

⁴⁶⁵ Riemann (1895, 6).

⁴⁶⁶ Ibid., 7, 10.

⁴⁶⁷ Ibid., 10.

⁴⁶⁸ Ibid.

⁴⁶⁹ Ibid., 9-10.

⁴⁷⁰ Ibid., 11.

Riemann's observations suggest pitch and dynamics are elements that operate *through* the medium of timbre to alter our perception of musical brightness — once again suggesting that timbre is, partially, an *emergent* property from other parameters. The examples listed in tables 4.1 and 4.2, as well as the short analysis of timbre in 'Der kranke Mond', above, all rely on this principle, as do the case studies that follow. Where traditional definitions have sought to isolate timbre as a quality in itself, this thesis suggests otherwise: that it is actually the result of pitch and dynamics played *through* certain instruments, or instrumental combinations. Schoenberg expressed similar sentiments, over twenty years later, in his *Harmonielehre*:

The distinction between tone colour and pitch, as it usually expressed, I cannot accept without reservations. I think the tone becomes perceptible by virtue of tone color, of which one dimension is pitch. Tone color is, thus, the main topic, pitch a subdivision.⁴⁷¹

That timbre was still 'usually expressed' independently from pitch and dynamics, shows that Riemann and Schoenberg were clearly in the minority when publicly putting forward such views. Their comments once more highlight the problematic status of timbre at that time (should timbre be viewed as a separate, potentially superficial parameter, or should it be seen as emergent property, and therefore a fundamental part of musical expression?), and that certain contemporary voices were attempting to understand its effect and value in relation to the other musical parameters. As such, the aim of the case studies that follow is to present a critical analysis of the use and value of certain orchestral tropes and their timbral transformations, drawing partially on recent theory but grounded in the historical context that this and previous chapters have outlined, in order to shed light on a particular topic and historical moment — in this case, the *fin-de-siècle* Viennese musical night scene.

The key distinction between the nocturnal musical tropes of 'moonlight' and 'darkness', defined above, is one of relative timbral brightness — in part governed by the timbral quality of the instruments themselves, but also by the relation to pitch (*tessitura*), and dynamics (strain, saturation, or their opposites at the lower threshold of perception). Each of the two case studies examines, from a current theoretical perspective, the use of these historically-grounded orchestral tropes and their transformations, analyzing how Viennese composers used timbre as a key

⁴⁷¹ Schoenberg (1978, 421).

parameter in the nocturnal portrayal of the particular Viennese concerns outlined in the opening section above. Each takes the form of a descriptive analysis followed by discussion of timbre's 'added value' in each instance.

4.2. — Nocturnal Case Studies

4.2.1. — Schoenberg's *Erwartung*, op.17, and the 'hysterical' night

Erwartung provides an ideal case study with its frequent and varied use of the 'moonlight' and 'darkness' tropes. Throughout, Schoenberg provides detailed stage directions concerning the status of moonlight and darkness in each scene, and, toward the end of the final scene, the arrival of daybreak. The piece itself tends to avoid traditional musical processes that imply clear rationale or logic. However, comparison of Schoenberg's use of the nocturnal tropes with the scene actually visible on stage, presents us with additional evidence that suggests the increasing detachment of the protagonist from the external 'reality' of the stage world that surrounds her, and depicts her retreat inward to an alternate mode of consciousness.

Table 4.3 charts this trajectory from external reality to internal fantasy, by categorizing each prominent appearance of the moonlight and darkness tropes. This table should be thought of less as a 'diagram' that provides an immediate overview, but rather as a comprehensive 'reference' resource that I refer back to throughout my analysis. Rather than just being a comprehensive list of each trope as it occurs, the table instead *categorises* each trope in accordance with whether it matches the visual scene described in Schoenberg's detailed stage directions. The analytical judgements that follow examine how the protagonist's spoken thoughts, the visual scene, and the music all intertwine to suggest certain subject positions throughout. Each timbral trope is categorised as follows: [TT|C], 'Timbral Trope: Correspondence to visual scene', (these moments of correspondence imply Gorbman's 'level of belief, or 'immersion in the diegesis', on behalf of the spectating subject, and also a functional 'convergence', as discussed in the previous chapter); or [TT|NP], 'Timbral Trope: Not Present in the visual scene', if the same tropes are heard, undistorted, yet without visual correlation on stage (e.g. if a moonlight trope were *heard* but without *seeing* any moonlight on stage). Here the

spectator's 'level of belief' in the diegesis is suspended through disjunction of sound and visual scene. A second broad category, that of 'Distortion', refers to moments of timbral distortion (through upper extremes of tessitura, or dynamics), and is subdivided into 'Distorted, Not Present in visual scene' [D|NP] (reflecting moments of general timbral distortion with no visual correlation), or 'Distorted Timbral Trope' [DTT], specifically reserved for moments where nocturnal trope and visual scene correlate (as in [TT|C]), but the trope is heard to be timbrally distorted. A final unique category, 'Love reminiscence, Not Present' [L|NP], refers to a trope first encountered in bars 19-20 (figure 4.1), and 55-68.

Figure 4.1 — First appearance of the 'Love reminiscence' trope, [L|NP], *Erwartung*, bb.18-20, UE 5361

The most important parameter defining this unique trope is its tendency toward tonal harmony, in stark relief to its atonal surroundings, and its occurrence at moments where the Woman reminisces about her past relationship with her lover. In figure 4.1 the first entry by the lower strings after '*Liebeslied*' ('love song') tends toward a chromatically altered Am^{b7} (with added 6th and 9th), and in the second chord in bar 20, toward Dm^7 , articulated by lower brass and woodwinds. The timbral emphasis here is on a 'richness' of sound, in both these cases emphasized by close harmony with wider spacing of the lower pitches to avoid any 'muddy' acoustic overlap. The rich harmonic scoring,

Table 4.3 — Outline of Schoenberg's *Erwartung*, op. 17, using timbral categorization

ERWARTUNG:

	Scene I. [<i>Forest edge. Roads and fields lit by moon; forest tall and dark</i>]	Scene II. [<i>Inky blackness, broad path</i>]
Trope Category	[TT C]—[D NP] [TT NP]-[L NP]-[D NP]—[NP LD]—[D NP]	[D NP]—[TT C]-->[L NP] ----- [TT C] [D NP] [TT C] [D NP] [TT C] [L NP] ----> sc.III
		[TT NP] [TT NP]
Bar Nos.	1ff. 11-14 15-17 19-20 23ff. 29 35ff.	38ff. 45-7 55----- (62)----- (67)----- 68 73 75ff. 81-2 83-5 86-8 89-90

	Scene III. [<i>Path still in dark. Next to it a broad band of light. Moonlit clearing</i>]	Scene IV. [<i>Moonlit road from darkness of forest. White house. Dress torn; blood on hands</i>]
Trope Category	(scene change) sc.II --> [TT C]--->[D NP]-->[L NP]-----[D NP]-->[TT C?/D NP?]----	-->[L NP] -[DTT]---->[D NP]----- [DTT]---->[D NP]----->
	[D NP]	"Das ist Er!"* ☺ "Hilfe!"*
Bar Nos.	91-2 93-5 97----- (100)----- 105 113ff.	129-131 132-5 138ff.----- (154)----- 160;165 173ff.----- (190)----->


	Scene IV. (continued)	
Trope Category	-->[L NP]---->[NP LD] ----->[D NP]-->[L NP]----->[NP LD]*---- [DTT]*---[NP LD]-->["TT C"] [D NP]-----[DTT]*->[L NP] [D NP]-->[NP LD]	
	* *	
Bar Nos.	196ff. 201ff.----- (220;225)-----226ff. 230ff.----- (240)-----257 258-60 263ff. 270 273ff. (292) 318 321-3 324ff. 353ff.	

	Scene IV. (continued)	
Trope Category	(daybreak) [TT C]->[DTT]->[NP LD]--[TT NP]-[NP LD]-->[D NP] [TT NP]--->[D NP]	
Bar Nos.	382 385 389ff.----- (403)-----405ff. 411ff. 418 420ff.	

KEY

[TT|C] = 'Timbral Trope: Correspondence to visual scene'
 [TT|NP] = 'Timbral Trope: Not Present in the visual scene'
 [DTT] = 'Distorted Timbral Trope', compared to visual

[D|NP] = 'Distorted, Not Present in visual scene'
 [L|NP] = 'Love reminiscence, Not Present'

* = highpoint
 --> = transition
 -- = sustained  = 'metameric' link

emphasis toward tonal harmonic language (often pausing on a single sonority), plus the allusions in the text, all combine to create a moment of sensuous introspection in contrast to the music that frames it.

Table 4.3 acts like a timbral ‘story-board’, or time line, similar to the frame-by-frame analysis of a film score that charting the shifting timbral qualities, and function, of the music as the scene unfolds in real time. It also serves as a chart to which the following analyses refer. It is important to highlight that two different occurrences of the same category in the table do not necessarily *sound* the same, but rather can be considered to have a similar *function*.

—*Lack of ‘Real’ in Erwartung’s Final Scene, subjective crisis and inward retreat*—

Examination of table 4.3 shows that the first three scenes have numerous occurrences of [TT|C], moments where the nocturnal timbral tropes of moonlight or darkness correlate with the visual scene presented on stage (e.g. a moonlight trope is heard, and moonlight is visible on stage). This would suggest that, despite the numerous distortions and reminiscences that happen in these opening scenes, *Erwartung’s* hysterical Woman still maintains occasional contact with the stage world surrounding her. This is contrasted with the extended final fourth scene, where occurrences of [TT|C] are *replaced* with [DTT] and [TT|NP], which I suggest implies a change in subject position: the Woman’s sense of subjective crisis increases, followed by her retreat inward in an attempt to escape that which surrounds her.

Here the theoretical grounding is similar to Abbate’s noumenal/phenomenal distinction, except the emphasis is not now upon what the protagonist can or cannot *hear*, but what they are able to *see* (table 4.4).

Table 4.4 — Abbate’s Theory Modified toward the Visual

	Abbate’s Theory (auditory)	Modified here (vision)
‘Noumenal’	Music only audience can <i>hear</i> .	‘Noumenal’ staging (protagonist cannot <i>see</i> , only audience), [TT NP]
‘Phenomenal’	Music <i>heard</i> by both protagonist and audience.	‘Phenomenal’ staging (both protagonist and audience can <i>see</i>), [TT C]

In *Erwartung* the assumptions of Abbate's theory are reversed. In this expressionist setting, the assumption is that we are *hearing* the internalized reactions of the solitary protagonist: an assumption confirmed by the nature of the text, and the numerous instances where auditory and visual fail to align. What should be made of these discrepancies? I would suggest that, much like in Abbate's theory, the listener assumes the role of arbiter of 'truth' unable to be deceived, and, as a result, the source of any discrepancies or distortions is assumed to be the protagonist on stage. Such is the case here in *Erwartung*, where discrepancies between the four stable visual scenes and constantly changing auditory response are not our own, but rather those of the Woman who is not always privy to the 'phenomenal' staging around her.

According to table 4.1, up until the final fourth scene all occurrences of the nocturnal tropes have been examples of [TT|C], correlating with the on-stage visual setting, or [TT|NP], which, following the libretto, are presented as reminiscences (e.g. "...the moon was so bright earlier...", bb.15-17), neither of which can be classed as abnormal human responses. However, this is where the fourth scene differs. Here we have the first appearance of [DTT], where timbral trope and visual align, but with timbral distortion (see figure 4.2).

The first occurs at the opening of the scene, bars 132-7, as the Woman 'looks down the road' lit by moonlight. Schoenberg's stage directions specify a 'broad, moonlit road', but to the Woman it appears "pallid".⁴⁷²

⁴⁷² "Noch immer die Stadt...Und dieser fahle Mond...", scene IV, bb.132-3.

noch etwas langsamer ♩ = 50

Figure 4.2 — Schoenberg's *Erwartung*, bb. 132-4 ('moonlight', [DTT]), UE 5361

The distortions she describes are present in the musical accompaniment, contradicting the visual stage setting. First, the flute, *pp*, in its lowest tessitura, is presented much like in the 'Der kranke Mond' example from earlier. Secondly, at the word 'Mond' a celesta figure is heard — a clear, undistorted, example of the second 'moonlight' trope. However, this motif is subject to a series of distorted echoes on the solo violin which, if we compare this to the established tropes in table 4.2 (rows 1-4), can be heard as being distorted not through its muted *pp* presentation, which is the established norm, but rather through the unusual use of tremolando which serves to reduce the prominence of the pitch value of the tone and instead put greater prominence on the 'noise' element (especially at this quiet dynamic). Finally, the usually *static* trope of 'diffuse moonlight' is broken into alternating chords, and the use of double-stopped string harmonics creates a distorted sound due to the lower strings playing outside their stable tessituras. The audible distortion and mimicking of the moonlight tropes, in contrast to the stable visual scene, causes the listener to adopt the subject-position of external observer, aware that the perspective they hear does not exactly correlate with what they can see, and as a result attribute it to the distorted perspective of the Woman.

Two further examples of [DTT] in the fourth scene can be examined as a unit, for in both instances a unique timbre is heard: a harp with paper placed between the strings. The first occurs in

bars 258-260, where the steady quaver triplets symbolically illustrate the Woman's line "Your blood still drips with a gentle pulse...". The second appearance of this unique timbre (b. 318), coincides with the words "Oh, the moon wavers [*schwankt*]...I cannot see...". Alongside the distorted timbre of the harp, the celesta—established as one of the prominent timbral elements of the moonlight trope—is heard. The clear association with blood, at the altered harp's first appearance, implies a familiar expressionist symbol: the 'sick' blood-red moon. For example, it is found in Berg's *Wozzeck* (Act III, sc.4) where it takes on greater scenic prominence. The difference here in *Erwartung* is that the moon on stage is *not* blood-red, whereas *Wozzeck's* stage directions stipulate that 'the blood-red moon breaks out from behind the clouds'. In *Erwartung's* final scene, the disjunction between seen and heard once more encourages a subject-position which views the Woman as having a distorted view of her stage surroundings (in contrast to the example from *Wozzeck* where auditory and visual distortions align).

If these two examples are indicative of the Woman's increasingly distorted view of reality following some unnamed incident in the interlude preceding the final scene, then how might one interpret the two *undistorted* occurrences of the nocturnal timbral tropes in the piece's final moments? Bar 403 is the first instance, declaring she is "alone in [her own] night".⁴⁷³ Here the bar is split in two, each half containing archetypal tropes of the 'night': in the first half, 'darkness', the harp and muted double bass, *ppp*, in their lower register; and in the second half, harp and solo violin, both playing harmonics in their upper register, provide the 'moonlight' trope. The problem is that it is no longer night, and the scene on stage is no longer dark — there have been no further stage directions since the earlier moment of sunrise in bar 382 ('Twilight in the east. Low clouds in the sky, illuminated by the pale yellow glow'). Similarly, nine bars before the end (b.418), the woman declares "it is dark", accompanied by the darkness trope (played by double bass, bassoon, and harp in its absolute lowest register — '*womöglich Oktave tiefer*'), as well as the suggestion of the moonlight trope on the celesta at the word 'beacon'.⁴⁷⁴

Examination of table 4.3 shows that both instances are labelled [TT|NP]. However, these instances are no longer couched in reminiscence (as the [TT|NP] instances in scenes 1-3 were).

⁴⁷³ "...allein in meiner Nacht."

⁴⁷⁴ "Flammenzeichen".

Following the scene change at the moment of daybreak, these heard moments of nocturnal darkness contradict the bright visual scene with which they are juxtaposed. This contradiction of the visual and auditory suggests the character's attempted inward retreat from the crisis of the external stage world, to an imagined nocturnal space. Modification of Abbate's theory of the noumenal/phenomenal allows this interpretation, through analysis of Schoenberg's use of the nocturnal timbral tropes in comparison with the visual scene, to suggest an increasing detachment of the Woman from the stage world, initially through distorted views of that stage world ([DTT]), followed by an attempt to escape that which surrounds her ([TT|NP]). In such a move, *Erwartung's* Woman exemplifies the inner crisis and attempted withdrawal that were outlined as central concerns of the Viennese night scene at the start of the chapter.

Even without the above analysis, *Erwartung's* frequent—and often sudden—changes in register, dynamic levels, and timbral configuration already suggest a subject in crisis, especially given the textual content (and often confused nature) of the libretto. This analysis does not replace or dismiss these immediate perceptions, however, but uses the historically-grounded nocturnal tropes, set out in tables 4.1 and 4.2, and the correlation between visual and timbral brightness, to highlight how Woman's increasing despair and distorted outlook is intensified through the way the work's timbral-visual construction interacts with her thoughts, visions, and perceptions.

Whilst table 4.3 requires textual explanation to reveal the choices made, serving more as a 'reference' table than as a standalone analytical diagram, it does provide a framework through which occurrences of the same timbral trope can be interpreted entirely differently (the appearance of similar night tropes having completely different narrative meanings at the end, than at the beginning, when they correlated with the visual stage scene). This is considered a strength of this timbral analysis, and a step away from the straightforward lists and taxonomies that discussion of timbre often evokes.

Arguably, the timbral construction of *Erwartung* is one of its most prominent parameters. Isolating and analyzing such timbral elements through higher classification allows a narrative trajectory to be plotted, ostensibly independent of tonality, rhythm, or pitch, yet without remaining abstract to the drama.

4.2.2. — Nocturnal ‘dreamscapes’: contrasting portrayals in Schreker and Zemlinsky

This second case study continues to examine the idea of night as locus for individual escape, this time in the consideration of two musical ‘dreamscapes’. The first, Schreker’s *Nachtstück*, has been referred to as a stream-of-consciousness dream sequence by several authors (Neuwirth, 1972; Kienzle, 1998; Hailey, 1997) — a category I intend to re-assess, suggesting instead that the fourth song of Zemlinsky’s *Lyric Symphony* functions more successfully as a moment of nocturnal fantasy through its musical construction and timbral design.

Schreker’s *Nachtstück* is the concert version of the third-act prelude from his opera *Der ferne Klang*, throughout which there are reminiscences—in the form of musical quotations—from earlier moments in the opera. For the composer, the interlude “added something new to the plot” which was not “expressed in the text; that is [...Fritz’s] dreams”.⁴⁷⁵ According to Ulrike Kienzle, the piece maintains such a dream character through “motivic and thematic processes that are analogous to the stream-of-consciousness associations [*Assoziationsreihe im Bewußtsein*] of the reflecting subject”.⁴⁷⁶ However, the *Nachtstück* was first heard in its concert version on 25 November 1909, independent of the opera from which its ‘reminiscences’ were drawn. It is therefore unsurprising that one critic described the piece as a “picture [that was] intentionally confused and fragmented”,⁴⁷⁷ for it is only when one is familiar with the operatic *context* from which these fragments are drawn that the piece can be heard as Schreker or Kienzle suggest, and which Peter Franklin describes as “a strikingly modelled stream of consciousness”,⁴⁷⁸ or, in Gösta Neuwirth’s words: “the first consistently realized manifesto of regressive [*rückläufigen*] form, a ‘monologue intérieur’ developed out of the intuitively reproduced logic of the dream”.⁴⁷⁹ In the opera, the interlude leads from an evening scene outside the opera house into the final scene with a sick Fritz in his study listening to a naturalistic dawn chorus of birds. In this sense, the interlude *can* be heard to have taken place at night, but only in retrospect. Unlike *Erwartung*’s use of nocturnal timbral tropes, there is nothing within this piece of music

⁴⁷⁵ Schreker, quoted in Hailey (1997, V).

⁴⁷⁶ Kienzle (1998, 298).

⁴⁷⁷ Anonymous critic, quoted in (Hailey (1997, III).

⁴⁷⁸ Franklin (1991, 169).

⁴⁷⁹ “...als das erste consequent durchgeführte Manifest der rückläufigen Form, ein »monologue interieur«, entfaltet aus der intuitive nachvollzogenen Logik des Traums”, from Neuwirth (1972, 169).

(independent of its operatic context), that suggests its nocturnal placement *prior* to the arrival of Fritz's dawn scene. The interlude's frequent—often sudden—shifts from one musical quotation, key, or style to another, leads to the 'confused' and 'fragmented' structure which—for Kienzle and Neuwirth—results in the categorization of Schreker's interlude as a model of distressed 'stream of consciousness'. But, as Franklin asks: "whose consciousness"? Here Franklin highlights that Schreker's interlude "clearly *give[s] way*" to the music of Fritz's dawn scene, rather than the two being connected⁴⁸⁰ — the concert version clearly marks the two as separate, ending just before Fritz's scene begins. *Pace* Schreker, it is difficult therefore, without a protagonist on stage, to hear the interlude as depicting 'Fritz's dreams'. Instead it presents a series of fractured reminiscences, which, without an obvious agent upon whom to attribute these musical recollections (they are all taken from moments in the opera where both Fritz and Grete were present), might equally serve as a montage of recollections that the listener could project their *own* agency upon — perhaps that is one of its strengths.

For the operatic premiere in 1912, Schreker cut 79 bars from the act III interlude,⁴⁸¹ removing some of its most complex layering and disorientating textures. With these bars removed, the resulting interlude is far more conventional, still made up of allusions to early moments, but less dramatic in its timbral and stylistic contrasts. As a result, the reduced operatic interlude functions much like any other musical scene change containing thematic reference to past action, rather than a depiction of Fritz's moment of nocturnal self-crisis.

Kienzle and Neuwirth's analyses of the *Nachtstück* as nocturnal dream-process appear problematic, for whilst their motivic-structural analyses are rigorous, they seem overly reliant on the scenic context external to the interlude itself, rather than discussing how the musical material might evoke such a subject position independent of such context (especially important given the stand-alone performance of the original *Nachtstück*). Kienzle, for example, takes the stand-alone *Nachtstück* as the basis for her remarks, but at the same time grounds her judgements in the specific scenic context that surrounds the shorter version in its operatic setting. In addition, Kienzle suggests (through motivic associations) that the "musical perspective" of the *Nachtstück* shifts from that of

⁴⁸⁰ Franklin (1991, 169).

⁴⁸¹ Bars 154-232 in the recently reconstructed *Nachtstück* score, edited by Christopher Hailey (UE 30387).

Grete at the start, then shifts to Grete and Fritz, finishing with Fritz alone.⁴⁸² But here we return to the problem of ascribing agency to a scene where no protagonist is present: Kienzle's association of certain motifs with certain characters is unproblematic, but to then suggest that the presence of those motifs implies the 'perspective' of that character seems to be ascribing agency where it cannot be confirmed.

To assess any piece of music as a dream sequence convincingly requires an identifiable agent to which such a subject-position might be ascribed — *someone* must be doing the dreaming. Equally, the occurrence of musical quotation framed as reminiscence is not enough to suggest a musical dreamscape — dreams rarely take the form of straightforward nocturnal reminiscences, but rather make *distorted* allusions to such events, or are fantasies of events that have not yet or (more likely) will never occur. Thus, whilst the structurally fragmented series of musical quotations found in Schreker's operatic interlude might be heard, retrospectively, as the fevered recollections of Fritz from the scene that follows, nothing in the music suggests either a nocturnal setting (none of the fin-de-siècle tropes from tables 4.1 or 4.2 are present) or the level of distortion necessary for its classification as musical *dreamscape*.

In contrast, I suggest the fourth song of Zemlinsky's *Lyric Symphony* ('Sprich zu mir, Geliebter...'), through its use of nocturnal timbral tropes, and in its timbral construction more generally, approximates more closely the function of a musical dreamscape. In doing so it provides another example of the Viennese night scene as the site for subjective crisis, and an attempted inward retreat from an external world, portrayed through timbral means.

The song takes place at night, following a moment of union between the Man and Woman. Here the Woman's response is heard, expressing her desire that the moment be prolonged alongside her wish that the night would not end. Various aspects of the song's construction encourage a subject-position which might view the Woman's expressions in the song's central section (Reh.[69]-[82]) as nocturnal fantasy, as attempted inward retreat from her external world. It is during this section that the Woman's dialogue switches from present to future tense, describing events that she

⁴⁸² See Kienzle's discussion of the *Nachtstück*, (1998, 298-335). For a diagrammatic outline of the interlude, and thematic overview, see pp. 301-3.

imagines might take place. However, this simple textual change does not occur in isolation, and the remainder of this case-study examines how the song's timbral construction, through the use of nocturnal timbral tropes, pre-empts and reinforces this change of perspective and potentially suggests a moment of dream

Immediately prior to this 'fantasy' section is a moment of Abbatian narrative disjunction, or Adornian timbral 'breakthrough'. At rehearsal [67]⁴⁸³, following a distinct presentation of the moonlight trope (*divisi* and solo upper strings, harp, and celesta), the tuba and contrabassoon enter, *pp*, in their lower tessitura. This entry fits the timbral criteria for the darkness trope, and its role as such is confirmed immediately with the singer's words, "*Die Nacht ist dunkel*". As an example of Adornian breakthrough, which is usually exemplified by sudden explosive gestures, the rather gentle entry of tuba and contrabassoon seems counter-intuitive. However, similar to our discussion in the second chapter, two reasons serve to give this tuba-contrabassoon entry the 'disjunctive' quality I suggest. The music, so far, has been tonally firmly rooted in D (fluctuating between major, minor, and pentatonic modes). However, the descending entry of the tuba and contrabassoon (B—A^b—F^b, finally settling on E^b), is tonally far-removed, clashing with the 'moonlight' pentatonic cluster still present (D, E, [G], A, B). In addition, the entry creates a moment of *timbral disjunction* through the sound's timbrally grainy texture, contrasting with the music that has so far been confined to the softer timbres of clarinet, harp, celesta, and strings. As a result, the entry fulfils the 'outsider' status required for breakthrough through its breaking of this song's established *intra*-compositional norms, and, even though it does not have the force to '*shatter* the walls of the securely constructed form',⁴⁸³ its double-outsider status does create a moment of Abbatian disjunction which serves as a 'performative gesture' that quietly undermines the sense of stasis that has so far prevailed.

Immediately following this moment of nocturnal darkness (framed as such through the disjunctive intrusion of the elements associated with fin-de-siècle 'dark' nocturnal topoi: low pitched strings/brass at their lowest dynamic threshold), the auditory scene begins to become less stable through timbral and harmonic 'distortion': still over an E^b pedal, muted trombones enter at [69]², *pp*, playing a D minor triad. Five bars later this is distorted through the use of parallel trombone glissandi. At the same time a solo clarinet, *pp*, plays a rapid chromatic gesture in its lowest tessitura

⁴⁸³ Refer back to the earlier discussion of Adornian 'breakthrough' in chapter 2.

(see figure 4.3). In the following bar, a solo violin, also *pp*, plays a tremolando downward glissando spread over two bars. Simultaneously, the sustained upper-string pentatonic cluster from earlier ('moonlight') has become chromatically altered and itself subject to glissando distortions:

Figure 4.3 — “The wind sighs through the leaves”, from Zemlinsky’s *Lyric Symphony*, Song 4, UE 7371

Here, marked ‘completely withdrawn’ (*ganz zurücktretend*), the string glissandi further add to the list of instrumental gestures that are played at the threshold of perception, partly obscured by the other musical events taking place simultaneously. This partial masking is evident in three separate recordings⁴⁸⁴ where the string glissandi are barely audible under the sound of the singer; the trombone glissandi and clarinet gesture of the preceding bar are more distinct, but to various extents still partially masked by the rest of the auditory scene. The Woman’s words in the previous bars highlight the dark quality of the night, and here, from an ecological standpoint, the music mirrors a visually dark setting, by obscuring its musical objects, placing many of them at the threshold of perception. This ambiguity of the individual elements mirrors the timbral construction found in

⁴⁸⁴ Lorin Maazel’s 1987 recording with the Berlin Philharmonic (*Deutsche Grammophon* CD, 1987, DG 419-216-2); James Conlon’s 2007 recording with the Gürzenich-Orchester Köln (*EMI* CD, 2007, 372 4812); and Antony Beaumont’s 2003 recording with the Czech Philharmonic Orchestra (*Chandos* CD, 2003, CHAN 10069).

Schreker's distant sound, or the opening idea of his chamber symphony, as their equally diminished timbral profiles place each element on a single plane at the very rear of the sound stage (once again, cf. fig 9, ch.3). The partial masking described above, results from the sounds having a similar level of brightness, approaching equiluminance. It is the brightest sound that is most perceptible at any given point, but, given the reduced brightness of the scene as a whole, the slight brightness fluctuations of each element as they are performed is what gives the music an ambiguous sense of flux, mirroring sounds or objects in the distant night, where individual elements are obscured and masked one moment, and barely audible the next. Such obscured gestures are heard sporadically throughout the remainder of this night scene. In addition, the words at this point—"the wind sighs through the leaves"—leave little ambiguity as to what such quiet fluttering and sliding timbres are meant to symbolically suggest.

The music, having thus suggested a darkening of the nocturnal scene through the contrasting introduction of dark nocturnal tropes and timbrally distorted threshold gestures, then proceeds to undermine such straightforward ecological correlations in the 'fantasy' section that immediately follows. It is at this point that the Woman's words switch to future tense, as she begins to imagine her last idealized moments with the Man. Each of her phrases describes a physical act, with each act accompanied by a distinct musical gesture. However, whilst the acts she describes are new, the gestures are not — they have been heard already as the nocturnal tropes and distorted gestures described above. For example, her first phrase "I will loosen my hair...", is answered by a gesture in the harp and celesta ([71]⁺), a combination so-far associated with the trope of moonlight; her intention to "wrap my blanket round you, like the night", answered by a clarinet gesture ([72]⁺) like that found in the first bar of figure 4.3; "I will shut my eyes", accompanied by the violins with descending tremolandi glissandi ([75]⁻) like those in figure 4.3, bar 2, whose symbolic associations in that setting were of rustling leaves.

Here there is a disjunction between signifier and signified in the material of Zemlinsky's song—between the Woman's textual descriptions, here, and the strong associations set up by the music, earlier—that reinforces the subject-position which enables the Woman's remarks to be viewed as 'fantasy': placed simultaneously, the two elements no longer match. However, unlike *Erwartung's* moments of distorted fantasy, the lack of extreme outburst or ever-changing and

intensifying timbral distortions suggests a more stable retreat inward on behalf of the *Lyric Symphony's* protagonist.

Once again, this interpretation requires the implicit understanding that a fin-de-siècle listener would have associated the 'inter-compositional', i.e. intertextual, nocturnal tropes of darkness and moonlight with the elements Zemlinsky puts forward in this song. In addition, it suggests a sense of narrative disjunction in the centre of the song that stems from the changing associations of the same sustained timbral tropes throughout the piece.

If this central nocturnal fantasy section is framed at the start through the disjunctive timbral breakthrough of the tuba-contrabassoon 'darkness' trope, and the continued presence of distinct timbral gestures texturally concealed and obscured (whose nocturnal symbolic associations were initially clear), the end is signalled by a return of the song's opening material ([79]). This simultaneously occurs alongside the moment where the Woman's textual observations and musical gestures—signified and signifier—correlate once more: an extended chromatic string-tremolandi gesture (played *ppp* by the violas, [79]¹, then continued in the cellos) accompanies the moment the Woman describes how "the trees will whisper in the dark". Here, at the third occurrence of the timbrally distinctive chromatic string-tremolando gesture, the initial association (see figure 4.3) with trees, wind, and rustling leaves returns. In other music, such string gestures are often referred to informally in similar terms ('the rustling strings'), the semiotic associations of which perhaps stem from the rapid movement of surface against surface, and the muffled sounds of the friction therein. In contrast, returning to Zemlinsky's song, there is no easy semiotic correlation to be found in the middle occurrence of this gesture ("I will shut my eyes", see above), and, as a result, disjunction between textual allusion and musical trope occurs, only held together by their synchronized presentation. A similar tension occurs in the other presentations of nocturnal tropes in the central fantasy section, where the strong associations set out at the beginning no longer correlate with the gesture described by the Woman's fantasy. It is the continued presence of the same repeated nocturnal tropes throughout the entire piece, but whose semiotic associations fail to correlate with the central section's textual descriptions, which suggests a detachment on behalf of the protagonist from her surroundings. This 'detachment' is emphasized by each timbral trope's previous reference to an element of the external nocturnal world (the moon, darkness, rustling leaves/wind), which in

the nocturnal fantasy section are attributed by the Woman to personal, individualized gestures (letting down of hair, wrapping of a cloak, closing of eyes). Once more, then, the night scene is framed as an escape from the external world—where the subject is in crisis—to an inner idealized space. Here however, unlike in *Erwartung*, the escape is temporary.

In the wider context of Zemlinsky's *Lyric Symphony*, one could argue that it is in the nature of the work to possibly associate the non-literal matching of her text and timbral tropes in this central section with the unspoken words or diffuse emotional state of the figure of the Man. Equally valid, the underlying interpretation resulting from the unchanging timbral tropes, in disjunction with her dialogue, is still one of detached fantasy: either this disjunction reveals detachment from the Man's actions/words, or it symbolizes the Woman's desired encounter with the Man as she is alone (given the established 'nature' associations of each timbral trope). In the song that follows, the Woman is suddenly dismissed by Man, and the sixth song becomes an outpouring of grief. As a result, the ambiguity of their nocturnal encounter, revealed by this interpretation, seems narratively necessary for the drama that subsequently unfolds. It is primarily the underlying timbral construction of the song, in conjunction with its harmonic framework, that intensifies its sense of nocturnal uncertainty and detached fantasy.

At this point in the argument, it is necessary to answer the potential criticism that this central section of the song could be interpreted unproblematically as moment of nocturnal fantasy purely from a textual standpoint: the singer describes a night scene, and in the central section she talks in the future tense of her desires. It is easy, therefore, to interpret this song without any recourse to timbre. The focus of this analysis, however, is subtly distinct from that of simple textual exegesis: it is concerned, rather, with the way that timbre *intensifies* a particular mood or atmosphere.

The moment where the opening material returns, highlighted above, marks the beginning of the fantasy section's end but does not take the form of a sudden disjunction. The song's opening took the form of a predominantly-unaccompanied duet for solo violin and cello, but here at the reprise violin and cello are now muted, *pp*, and concealed under a thick orchestral texture (cf. both in appendix 4a). This concealed recapitulation of the song's opening material maintains the sense of distance created by the central fantasy section: compared to the foregrounded full sound of the rest of the orchestra, the now-muted, *ppp*, masked restatement of the opening material is presented as 'in

the distance' through its placement at the rear of the auditory scene. The occurrence of a strong recapitulatory gesture only comes in the final bars, with the return of the Woman's opening words and associated material "*Sprich zu mir, Geliebter*" ([82]⁴⁸⁵). After this point, however, the music no longer follows the opening — these are the Woman's last words, and bars later where one expects a reprise of the tuba-contrabassoon disjunctive entry suggestive of the dark night there is none, leaving the bright upper-string pentatonic cluster to be sustained without interruption as the song ends.

This recurrence of the opening material—marking a move away from the central fantasy section's confused semiotic associations, and text's eventual return to the present tense—ending in the literal repeat of the Woman's opening words, problematizes the temporal dimension of the central section in the song's narrative. The timbral construction of Zemlinsky's song engenders a subject-position that suggests far less time has passed for the protagonist in the central section than for the listener: this sense of suspended time is not only created by the song's circular structure, but also by timbral and tonal factors that I will now outline.

Referring back to the discussion in chapter 2, there are many moments in Zemlinsky's song that fulfil the requirements to be classified as moments of Adornian 'suspension' — moments that "compose out the old *senza tempo*".⁴⁸⁵ Frequently there are moments of total harmonic and timbral stasis: *Klangfläche*, articulated by the string family, sustain the harmony in question, over which ostinati repeat, or motivic fragments are articulated. These ostinati often give the illusion of movement, but harmonically no such movement occurs. Chapter two noted that moments of Adornian suspension often function as a contrast to the forward-pressing musical momentum of the moments surrounding it. But Zemlinsky's song lacks such forward-pressing moments, frequently creating timbrally-articulated moments of suspension built on D major, minor, or one of its pentatonic clusters.

Examination of the Zemlinsky's piano sketches further highlight this aspect of the music's timbral construction, for here one sees the music devoid of the numerous 'rustling' timbral gestures that were added after the sketching process, and which have become one of the important focal

⁴⁸⁵ Adorno (1992, 89), see discussion in chapter 2.

points for the analysis so far.⁴⁸⁶ The timbral distinction between the ‘suspended’ string *Klangfläche*, sustaining a single harmonic cluster, and the motivic material—presented simultaneously as two distinct timbral strata—allows the listener to hear the static nature of the underlying harmony, despite the active nature of the music’s surface. In this sense, Adorno’s comment that *Erwartung* “unfolds the eternity of a single instant in four hundred measures”⁴⁸⁷ might be better applied to the hundred measures of Zemlinsky’s song and the slowed sense of the temporal from these timbral sustained, but static, ‘suspensions’. This propensity of Zemlinsky’s song toward such moments of suspension, and timbrally obscured motifs on the threshold of perception, alongside the semiotically confused timbral associations of the central section (structurally framed by a moment of narrative disjunction and final, gradual return) — all these manipulations of the musical material help evoke a subject-position that views Zemlinsky’s song as a moment of nocturnal fantasy, of escape and gradual return; a moment where the protagonist distances herself from external associations, replacing them temporarily with personal ones.

Returning, once more, to the wider context of Zemlinsky’s *Lyric Symphony*, the fourth song is dramatically significant in the way it establishes these timbral tropes as the *intra*-compositional baseline for nocturnal music in this piece. The sixth song uses these established norms at the outset, but, as already noted, Zemlinsky frequently and forcefully ruptures these dark nocturnal tropes, even before the Woman has a chance to confirm that this is in fact a night scene (“*Vergiß diese Nacht, wenn die Nacht um ist.*”). The resultant subject-position in the first half of the song, then, is one of destabilisation: the low, sustained *pp* tone of the double bass and cello is interrupted first by the *fff* rising unison clarinet gesture (mentioned at the start of this case study), the bars later by a short *sffz* chord from the full trombone and horn sections, plus timpani ([100]⁺²). In addition, just before the entry of this chord the sustained pedal-tone in the double bass and cello—our dark nocturnal trope—is distorted for one *sffz* quaver only before returning, *subito*, to its *pp* dynamic and, in the following, bar *pppp*, at the threshold of audibility. Finally, in the final part of the song, any sense of nocturnal tropes is dismissed: the Woman sings her final line (“*...und es zermürbt meine Brust./...and it bruises my*

⁴⁸⁶ Sketches held at the Library of Congress, Washington, DC: *Alexander von Zemlinsky Collection*, box 20/2. The fact that these details were added relatively late might superficially reinforce the idea that timbre is very much a secondary parameter or afterthought, but the above analysis serves to challenge such a suggestion in that these timbral moments actually form an important element of the work’s narrative.

⁴⁸⁷ *Philosophy of New Music* (Adorno 2006, 30).

breast”) at the upper limit of her tessitura (top B^b-B-natural), *forte*, followed by a *ff* orchestral recapitulation of the first song’s opening which intensifies as it progresses into a full-orchestral *tutti*, often at the extremes of tessitura, with demisemiquaver and sextuplet figures filling in the orchestral texture that reaches its climax at [105]². Here we have a moment of extreme timbral brightness, a fully-saturated sound that, as we established earlier, has no place in the auditory nocturnal scene. This song functions in counterpoint, then, to Zemlinsky’s restrained, ‘normative’, use of nocturnal tropes in the fourth song. In that instance, the use of nocturnal timbral tropes remained within the culturally-established parameters tables 4.2 and 4.3 outlined. Even though we have established a sense of disjunction between text and music in that song, the tropes used could still be heard to mirror the brightness of an equivalent nocturnal visual scene. In this sixth song, however, Zemlinsky’s music creates a sense of disjunction by so clearly breaking the established boundaries of any of the nocturnal timbral tropes. As a result, the moments of the Woman’s restraint in both songs are placed in stark relief and, in the sixth song’s moments of timbral interruption and, finally, of timbral climax, any elements of the nocturnal timbre tropes appear completely and forcefully masked within the auditory scene. Whilst presented differently—perhaps in a way more similar to Schoenberg’s *Erwartung*—Zemlinsky’s music once more presents the female protagonist as either trying to escape, or at least as separate from, the nocturnal scene via timbral means.

We return one final time to Zemlinsky’s fourth song: to what extent can it be heard as a *dream* sequence? Though the preceding analysis certainly makes it possible to attribute Freudian concepts to moments in the song, concepts such as ‘condensation’ (the “fusing together of different ideas and images into a single image”, e.g. the anthropomorphized ‘moon’, ‘leaves’, and ‘darkness’ tropes of the central section), or ‘displacement’ (where “a potentially disturbing image or idea is replaced by something connected but less disturbing”),⁴⁸⁸ such attributions would seem rather forced. One could also add that dreams supposedly express wish-fulfilment, and that the sentiments of Zemlinsky’s protagonist fit this criterion, but according to Freud’s reformulation of this idea “*the dream is the (disguised) fulfilment of a (suppressed, repressed) wish*”.⁴⁸⁹ There is nothing disguised or suppressed about

⁴⁸⁸ Storr (2001, 45).

⁴⁸⁹ Freud (1997, 68). Italics in original.

the Woman's wishes, and though one could suggest that this song might therefore be heard as a "convenience" dream, (a category of dream requiring no interpretation),⁴⁹⁰ this too also seems forced — a 'convenient' label.

However, as I suggested at the outset, many of the features discussed in the preceding analysis *do* suggest the idea of nocturnal fantasy, and compared to Schreker's *Nachtstück*, Zemlinsky's song has a definite protagonist to which agency can be ascribed, and is not merely a series of recollections or reminiscences suggested through musical quotation, but rather a moment of fantasy, a subjective retreat framed through narrative disjunction. I would argue that in this respect Zemlinsky's song exemplifies a number of important features associated with the Viennese dream — a distorted sense of time; a nocturnal setting; confused associations; distance from the external world, with an inward retreat from a sense of crisis.

Both in this song, and in *Erwartung*, the discrepancies between each piece's timbral construction and their other parameters resulted in moments of narrative disjunction, both suggesting a retreat inward from a moment of subjective crisis. As was highlighted at the start, Le Rider viewed this 'escape' inward as a key issue for fin-de-siècle Viennese society, an issue mirrored in its cultural products. In addition, this chapter's opening made a case for the fin-de-siècle Viennese night scene as a space for the examination of the isolated individual, in contrast to the hectic social pressure of daily city life — but that such scenes rarely gave a sense of 'escape' due to the ever-present alienated subjectivity found in moments of excess, madness, or fantasy. The historically-grounded timbral tropes associated with the Viennese musical night scene were outlined, with their avoidance of saturated textures, and—in moments of 'darkness'—displaying a tendency toward obscured musical motifs on the threshold of perception with relatively low timbral brightness, which, from an ecological perspective, could be heard to mirror certain aspects of the visual night scene.

Whilst both case studies expose a similar subjective retreat inward, they do so by using the established nocturnal tropes and norms of night-scene construction in opposite ways: Zemlinsky's fourth song works *with* these established norms, constructing a musical night scene devoid of

⁴⁹⁰ Storr (2001, 46).

textural saturation, with numerous motifs on the threshold of perception, masked and obscured by the rest of the musical texture, in addition, nocturnal tropes are frequently used without any considerable distortion; Schoenberg's *Erwartung*, on the other hand, works throughout to establish and then subvert these nocturnal tropes through moments of distortion and saturation. To answer the question set out at the start—what is the ‘added-value’ given to these night scenes due to their timbral construction?—an approach was required that could interpret the frequent moments of disjunction found in each of the case studies. Abbate's noumenal/phenomenal approach to opera reception, focussing on what the protagonist can or cannot *hear*, was reversed to place emphasis on what they could or could not *see*. Such an approach was taken due to *Erwartung's* frequent disjunction of the musical, visual, and described setting. The synchronized, frequently mimetic relationship of the music to the protagonist's text suggested an ‘authenticity’ of expression on behalf of the Woman, but one that frequently failed to match the visual setting. It was in this disjunction, therefore, that Chion's ‘added-value’ seemed to be located. In Zemlinsky's song, there was no staged visual element, and as a result Abbate's narrative disjunctions were located solely between music and text.

Schreker's night scenes have hovered on the sidelines of this chapter's discussions because their topic is one that is more easily and obviously constructed. Rather than using the night scene to portray the dark of night, and the subject in crisis, Schreker's predilection is toward fin-de-siècle Vienna's other nocturnal obsession: the sensual, sometimes sexual, encounter. All of Schreker's night scenes follow the established Romantic structural pattern of the ‘wave form’ that was “built on a series of upswings, with each successive wave rising higher and higher toward a final effort, liberation and ecstasy”.⁴⁹¹ Stephen Downes highlights how this form was originally seen as a “paradigmatic metaphor in musical romanticism's aesthetics of the sublime”, but whose construction became equally suited to narratives of “erotic union”⁴⁹² — a point that Laurence Dreyfus also emphasizes in his book *Wagner and the Erotic Impulse*.⁴⁹³ Authors such as Downes and Daniel Grimley⁴⁹⁴ have extensively discussed the use, and deformation, of Romantic wave forms in early twentieth century music, and, in comparison, Schreker's use is not particularly radical: his erotic

⁴⁹¹ Early twentieth-century music theorist, Boris de Schloezer, quoted in Downes (2010, 177).

⁴⁹² *Ibid.*: this is one of the threads throughout Downes's book.

⁴⁹³ Dreyfus (2010), see, in particular, the books opening discussion.

⁴⁹⁴ Grimley (2011), see in particular chapter 4: ‘Energetics’.

night scenes gradually build in timbral intensity until the final climactic moments of overwhelming orchestral *tutti* subside. These were the overly-sensual timbral moments that conservative critics found problematic in fin-de-siècle instrumental music, and as a result critics could hardly deny that, in these particular operatic contexts, dramatic narrative and timbral configuration were well matched. Even the *Nachtstück* from *Der ferne Klang* follows this model of wave intensification, so that even though the interlude suggests the unstable subject-position described above—via sudden and disjunctive contrasts in style—it is also possible to view the interlude as Schreker desired: as the dream of “the longing for that one night that he could have spent with her”.⁴⁹⁵ Whilst Schreker’s night scenes offer less in terms of orchestral or structural originality, it is still important to acknowledge their timbrally bright construction as a stark contrast to the dark, crisis-filled moments offered by Zemlinsky, Schoenberg, and many of the other composers listed at the start of the chapter. Schreker’s scenes are equally founded in the fin-de-siècle Viennese views of the night, but for him the night really serves only as a backdrop for a familiar dramatic musical trope (the erotic encounter), whereas for Zemlinsky and Schoenberg, the night becomes a more complex and substantial occasion for subjective crisis and anxiety. Timbre serves here to signal a significant divergence of aesthetic practice, and highlights the more progressive nature of Schoenberg and Zemlinsky’s stage works at this point of their careers.

The framework set out in this chapter rests on two guiding threads. Firstly, there is the suggestion that the culturally-contextualised tropes involved in the timbral construction of the fin-de-siècle musical night scene are not arbitrary associations, but that these elements mirror physical attributes of the visual night scene (relative brightness; lack of saturation; obscured/masked musical objects on the threshold of perception). As a result, the semiotic signification of these nocturnal tropes moves from the Symbolic (“A conventionally stipulated relation [...] requiring knowledge of the convention for its interpretation”), toward the Indexical (“A ‘causal’ or directional connection to the object, established by context”), or the Iconic (“An aspect of the presentational form giving rise to a putative likeness to some object (either ‘naturally’ or by convention)”).⁴⁹⁶ As such, as I have argued

⁴⁹⁵ Hailey (1997, V).

⁴⁹⁶ These descriptions are taken from Naomi Cumming’s description of Peircean semiotics in *The Sonic Self* (2000, 97).

throughout, the musical night scene is particularly suitable for timbral analysis, as its main concerns—concealment, and (lack of) brightness—resemble timbre’s key attributes: ability to mask, and timbral brightness. ‘How did that orchestra suddenly get to a forest in the middle of the night?’ asked Abbate, but considering the above, a counter-argument to Abbate’s rhetorical statement might be to suggest that in the night scene, in particular, the timbral construction of the orchestral accompaniment often contains moments approaching naturalism or realism that are less frequently found elsewhere.

The second thread concerns the usefulness of the analytical method undertaken. For successful analysis, it was felt that a higher level of classification was required—beyond ‘Timbre A, Timbre B, etc.’—and in these two case studies this has been achieved. For example, the modified use of Abbate’s framework for *Erwartung*’s analysis allowed similar timbral tropes to be classified into different categories, allowing the analysis to move beyond simple structural observations (e.g. ‘Timbre B is repeated in bar 34’), and instead to assess the *function* of each trope as part of *Erwartung*’s narrative trajectory toward inward retreat. Similarly, in Zemlinsky’s fourth *Lyric Symphony* song, though in a less formal fashion, recurring timbral tropes were classified by their level of disjunction, and narrative function, to suggest inner retreat through a moment of potential nocturnal fantasy that contained key features associated with dream.

Through the timbral analysis of these two case studies, the Viennese musical night scene can be heard as a particularly important locus for the representation of subjective crisis and inward retreat or escape. In both works, the sense of ‘hysteria’ or ‘dream’, respectively, was already partly suggested by the sung text (the fragmented nature of *Erwartung*’s libretto, and change of tense in Zemlinsky’s song). However, it was only through the examination of their timbral construction—their use of nocturnal tropes; instrumental tessitura; masking; relative brightness; saturation—that additional musical evidence was provided for such interpretations, and suggested that whilst the immediate subject matter appeared to be ‘hysteria’ and ‘dream’, arguably the real subject matter was night as the place where the crisis of the individual and the retreat from the external could be expressed. This chapter sets out a framework with which further Viennese nocturnal scenes, and musical night scenes from other locations, might be assessed and compared to establish how uniquely ‘Viennese’ this endeavour was.

**Timbre and the Uncanny Reconfiguration of the Outsider:
The grotesque in Zemlinsky's *Der Zwerg*, Op.17**

But the funniest part of the whole morning's entertainment was undoubtedly the little Dwarf. When he stumbled into the arena, waddling on his crooked legs and wagging his huge misshapen head from side to side, the children went off into a loud shout of delight, and the Infanta herself laughed[.] Perhaps the most amusing thing about him was his complete unconsciousness of his own grotesque appearance[.] The Dwarf, however, really was quite irresistible.

—Oscar Wilde, *The Birthday of the Infanta*

The final chapter returns to the themes set out in chapter 1, particularly the idea that certain timbral configurations, according to conservative fin-de-siècle commentators, were considered beautiful, excessive, ugly, or inappropriate. Here we turn to examine the way in which Zemlinsky appears to use these engrained viewpoints self-consciously for dramatic effect in his opera based on the story of Wilde's grotesque dwarf. This hermeneutic perspective allows for an analysis of Zemlinsky's *Der Zwerg* (1919-21) that suggests an evolving dialogue between the work's dramatic narrative and the variety of timbral and orchestral tropes employed. Here, the idea of *inter-* and *intra-*compositional fin-de-siècle orchestral expectations will once again play a strong analytical role.

This chapter examines both the role of individual timbres and the culturally grounded responses they might engender, but also it looks more broadly at the use of timbre within a specific orchestral 'style' or stylistic trope and how audiences might have responded to those. By this I mean the particular orchestral forces contemporary fin-de-siècle listeners would associate with music that we might now ascribe the labels 'neoclassical' or 'post-romantic', whilst acknowledging at the outset the diversity of stylistic labels and definitions as a historiographical problem. In examining *Der Zwerg*, Christopher Hailey, Sherry D. Lee, and Antony Beaumont all point to elements of neoclassical orchestration within the work, and associate these qualities with the music of the Infanta and her

court⁴⁹⁷ in contrast with what Hailey calls the “hyper-Romanticism of the Dwarf’s dramatic outbursts”.⁴⁹⁸ Clearly, post-romantic and neoclassical styles are made up of a complex relationship of differing harmonic, melodic, and rhythmic shapes and patterns. However, without denying the relevance of those parameters, this chapter’s analysis focuses primarily on the timbral construction of those contrasting styles, and the resultant impact on the opera’s dramatic narrative. Neoclassical elements are clear from the beginning as we are introduced to the Infanta’s Court for the first time: parallel 4ths and 5ths permeate the harmony in the opening bars; dance- and march-like rhythms hint at earlier musical forms; but also the orchestral element is clearly a distinct and important part of the neoclassical style. As Paul Bekker remarked in his contemporary monograph, *The Orchestra*, the late romantic orchestral style prioritised the “doubling of voices” and blending as a single group, gave way to a neoclassical style that prioritised an “opposite tendency, namely that of the earlier polyphonic emphasizing of the individual, unmixed color-value of each single instrument”.⁴⁹⁹ After a momentary orchestral *tutti*, the opening of *Der Zwerg* fades to a small, mixed, chamber ensemble with prominence given at various moments to both the harsher double-wind timbres (bassoon and oboe) and percussion (celesta, triangle, snare drum). At an immediately perceivable level, the use of the orchestra within *Der Zwerg* is as Hailey describes: it is the constant contrasts between the individualised, chamber orchestration that initially accompanies the music of The Court, and the blended full-orchestral *tutti* that initially accompany the Dwarf’s outbursts that are placed at the forefront in this opera. One contemporary reviewer, Guido Adler, was keen to draw specific attention to this contrast in his review of the premiere. He begins by drawing attention to the works opening: “A few bars orchestral introduction mark in humorous counterpoint the important birthday matters and the nimble busyness of the maids” and that the opening proved “an enchanting piece through [its] enchanting melodies and most delicate [*duftigsten*] instrumental sound”.⁵⁰⁰ The suggestion of ‘humour’ in the orchestral counterpoint perhaps hints at the elements of orchestral neoclassicism outlined above, but he finishes by emphasising the immediacy of the orchestral contrasts throughout the entire opera:

⁴⁹⁷ See Beaumont (2000, 304, 308-9), Hailey (2002), and Lee (2010, 211).

⁴⁹⁸ Hailey (2002).

⁴⁹⁹ Bekker (1963, 294-5), originally published under the title *The Story of the Orchestra*, in 1936.

⁵⁰⁰ “Einige Takte Orchestereinleitung, welche in launigem Kontrapunkt das Wichtige der Geburtstagsangelegenheit und die hurtige Geschäftigkeit der Zofen markieren [...] ein durch bezaubernde Melodik und duftigsten Instrumentalklang bezauberndes Stück”. Adler (1922, 185).

This is only a cursory enumeration of the details, as they have remained after a single hearing in the memory. Admirable in the highest degree is the almost chamber-musical subtlety of the Zemlinskyian orchestra, in which the woodwinds, delicate Brass, celesta, mandolin, and guitar are frequently used soloistically. The extreme force of emphasis is reserved only for the most powerful moments.⁵⁰¹

Adler clearly feels that Zemlinsky's opera provides orchestration at the extremes: from delicate chamber orchestration—which he associates with *The Court*—to large full orchestral *tutti*. However, at no point does he specifically refer to the orchestration as 'neoclassical', and this, I would argue is because, in this piece, Zemlinsky's is a mild neoclassicism when compared to that of, say, Stravinsky or Prokofiev: obvious bitonality, harsh harmonic dissonance, or extremes of distorted timbre are rare or isolated. From this standpoint, Zemlinsky's 'neoclassical' style in *Der Zwerg* appears more akin to the neoclassicism found in late Strauss, for example *Der Rosenkavalier*, and what Stephen Downes describes instead as a "neo-rococo"⁵⁰² mannerism. These "affected rococo manners"⁵⁰³ that Downes finds in *Der Rosenkavalier* are a contradiction of parts between the baroque-classical harmonic and melodic elements and an orchestral surface that still often chooses from the wide timbral palette of the post-Romantic orchestra. Arguably, we could view these neo-rococo mannerisms as a precursor to the harsher timbral and harmonic construction of the neoclassical movement, and that neo-rococo serves as a more accurate label for the moments of Zemlinsky's orchestration that we have so far called neoclassical. This only works if we accept that 'neo-rococo' can be defined as a style that not only looks backward for its harmonic-melodic source material and forward in its harmony and reduction of the vast orchestral forces of the fin-de-siècle orchestra, but also that it looks to the *immediate* past of the post-romantic orchestra for some of its more prominent timbral choices. Despite appearances, then, 'neo-rococo', unlike its modernist cousin, is complicated through its dominant sense of nostalgia rather than the drive for the new that neoclassicism movement aimed toward. This chapter shows the ways that Zemlinsky's *Zwerg* constantly contrasts this neo-rococo-style orchestration with more lavishly orchestrated post-romantic orchestral tropes in a way that pushes the opera's dramatic narrative forward. However, I wonder whether the question of stylistic

⁵⁰¹ "Dies nur eine flüchtige Aufzählung von Einzelheiten, wie sie nach einmaligem Hören im Gedächtnis haften bleiben. Bewunderungswürdig im höchsten Grad die fast kammermusikalische Feinheit des Zemlinskyschen Orchesters, in welchem die Holzbläser, zartes Blech, Celesta, Mandoline, Gitarre vielfach solistische Verwendung haben. Sie äußerste Wucht der Akzente ist nur für die ganz starken Momente aufgespart". Adler (1922, 186).

⁵⁰² Downes (2010, 239).

⁵⁰³ Slavoj Žižek, quoted in *Ibid.*

taxonomy (neo-rococo versus modernist, etc.) is actually a partial red herring. More important for the discussion that follows is the use of timbre as a motivic signifier, and as an agent in the opera's narrative structure—together with the associations of the beautiful and well-formed that were outlined at the start.

Of course, Zemlinsky was by no means the first to use such orchestral tropes explicitly as dramatic tools: a key theme in the scholarship surrounding Schreker's operas, for example, has been that the drama is frequently structured around a particularly distinct, or 'sensuous', timbral constellation.⁵⁰⁴ However, in this chapter I suggest that Zemlinsky's *Der Zwerg* could be seen as one of the first operas to use culturally-engrained fin-de-siècle perceptions of orchestral beauty in a dialectical relationship with the work's dramatic narrative, each affecting the perception of the other as the work progresses.

Whilst contemporary works like Schreker's *Die Gezeichneten* had begun to function not just as examples of highly sensuous orchestration but also as works whose drama at times criticised the sensuous acts it often depicted,⁵⁰⁵ Zemlinsky's *Der Zwerg* juxtaposes different orchestral styles in a more complex way that follows Adorno's model of immanent self-critique, which, despite the opera's adherence to traditional tonal schemes, allows it to be viewed as one of Zemlinsky's first explorations in a more modernist aesthetic. By doing so, Zemlinsky creates an opera that critiques not only contemporary societal response to physical beauty and the grotesque appearance of the Dwarf, but also contemporary responses to timbral beauty and the musically grotesque.

Julie Brown's survey of the musically grotesque suggests that its "most common understanding" is formed around "vulgar or [...] inappropriate sonic eruptions" or "comically 'crude' instrumental effects".⁵⁰⁶ Similarly, Esti Sheinberg aligns the musical grotesque with such exaggerated gestures that are often "applied to anthropomorphic sound-analogies, in accordance with a possible conceptual projection of the human body on the [musical] soundscape".⁵⁰⁷ It is unsurprising, then, that the small amount of space devoted to timbral concerns in Sherry D. Lee's recent article on Zemlinsky's *Der Zwerg* talks of the "grotesque quality of the string glissandi" that add

⁵⁰⁴ For some of the clearest examples, see Hailey's discussions surrounding *Der ferne Klang*, *Die Gezeichneten*, or *Der Schatzgräber* in the early chapters of Hailey (1993).

⁵⁰⁵ Peter Franklin makes this distinction, see Franklin (2006, 177).

⁵⁰⁶ J. Brown (2007, 2).

⁵⁰⁷ Sheinberg (2000, 211).

“a mocking tone” to the Dwarf’s first entry and the rhythms that “mime the limping of the little creature as he moves on his stunted limbs”.⁵⁰⁸ Based on Oscar Wilde’s story *The Birthday of the Infanta*, Zemlinsky’s opera explicitly comments on issues of beauty, self-identity, and self-worth: The Dwarf, presented as a gift to the Spanish Infanta, is unaware of his physical ugliness. After mistaking the Infanta’s mocking interest for love, the opera ends in tragedy when the Dwarf is confronted with his own mirror image and dies of a broken heart, leaving the Infanta disgusted that her “toy” is “already broken”. Lee’s article concerns the construction of the characters’ identities in their interactions with the others present, highlighting points where motivic, metrical, and harmonic attributes diverge and collide. However, she does not consistently discuss issues of self-presentation in private (i.e. when the Dwarf is alone) versus public—an issue that seems central to her argument. Nor, aside from the remark above, does she consider timbral aspects of the work’s construction, which I argue offer additional insight into the issues at the heart of her discussion.

At the start of the opera, the music of the Infanta’s maids and her Court seems refined when compared with the grotesque orchestral gestures that follow when they imagine the arrival of the Dwarf. Lee’s discussion places emphasis on such moments of orchestral ‘ugliness’, but does not mention the relative scarcity of these moments within the opera and that the majority of the Dwarf’s music is timbrally constructed as enchanting spectacle through his *Heldentenor* voice and post-romantic orchestral accompaniment in contrast to the neoclassical/neo-rococo orchestral idiom of the Court (for ease of reading, I use the term ‘neoclassical’ throughout the rest of the chapter, but always with the sense that Zemlinsky’s usage contains the elements of ‘neo-rococo’ post-romantic orchestral nostalgia that I set out above). I suggest, therefore, that within the dramatic context of Wilde’s play, it is the frequent juxtaposition of the Dwarf’s music with the neoclassically-stylized music of the Court situates Zemlinsky’s opera as a critique of the contemporary debate surrounding accepted standards of orchestral beauty and excess, outlined in chapter 1, that allows us to move beyond the conventional interpretation of the opera as a problematic autobiographical self-portrait-in-sound of Zemlinsky himself. Whilst *Der Zwerg*’s use of the timbrally grotesque is relatively infrequent, these moments are also narratively and dramatically central to the opera, and this

⁵⁰⁸ *The Other in the Mirror, or, Recognizing the Self: Wilde’s and Zemlinsky’s Dwarf*, (Lee 2010, 215). The string glissandi that Lee refers to are found at the Dwarf’s first appearance to the court (rehearsal mark [88]), but have been heard previously (R[44]²) at the point where the Chamberlain and Maids of the court discuss the Dwarf, prior to his appearance onstage.

chapter examines their use in Zemlinsky's work, moving beyond Lee's reductive reading. Furthermore, the chapter examines how other elements of the work's timbral construction uncannily reconfigures and reverses expected hierarchies of class and power as the opera progresses: the Infanta eventually presented as 'toy', compared with the Dwarf as enchanting centre of attention; and the gradual reconfiguration of the 'refined' Court's music as rigid, distant, and "anempathetic"⁵⁰⁹ to the scenes portrayed on stage.

5.1.1. — *Der Zwerg* and the Timbrally Grotesque

The use of the timbrally grotesque in Zemlinsky's opera is kept to a minimum; the 'crude' or 'inappropriate' use of the orchestra is limited to specific dramatic moments, where instruments are pushed beyond the normative limits set out in contemporary orchestral treatises to form a distorted sound. This "marginalization of the grotesque",⁵¹⁰ as Federico Celestini calls it, is equally noticeable in Schreker's ballet-pantomime *Der Geburtstag der Infantin* (based on the same story and originally written for the Vienna *Kunstschau* in 1908). In 1923 Schreker completed a revised version of the work (the year following the first performance of Zemlinsky's *Zwerg*); the revised suite omitted the closing mirror scene, with its timbral grotesqueries, placing greater emphasis on the refined, stylized dances that remained. Schreker's and Zemlinsky's choice to 'marginalize' the timbrally grotesque at this time forms part of the wider cultural movement in the post-war years away from the expressionist art of the first decades of the twentieth century, works that were frequently "saturated with the grotesque"⁵¹¹ — although it is arguable that neither composer fully participated in the expressionist movement itself. Their reticence toward the timbrally grotesque may also be grounded in what Julie Brown calls its "threshold aesthetic"⁵¹² — the idea that timbral gestures heard as grotesque are only heard as such for a short time, after which they are no longer abnormal and lose their outsider status. However, as the quotation from Wilde's play at this chapter's beginning demonstrates, it is important that the Dwarf not appear entirely repulsive, but also *enchanting* — in some way 'quite irresistible'. Schreker's piece does so through the lightness of style and delicacy of orchestration in

⁵⁰⁹ Michel Chion's term, in *Audio-Vision: Sound on Screen* (Chion 1994, 8-9).

⁵¹⁰ "...einen Schritt zurück in die Marginalisierung des Grotesken...", from Celestini (2006, 166).

⁵¹¹ Sheinberg (2000, 248).

⁵¹² J. Brown (2007, 2).

the Dwarf's dance scenes. In addition, Schreker's Dwarf was not presented as physically repulsive, but lithe and elegant, in the form of Grete Wiesenthal (see figure 5.1), especially when compared to the rigid Velasquez-like costumes of the Infanta and her court (cf. figures 5.1 and 5.2). The *visual* elegance of Schreker's Dwarf was, however, contrasted by the "grotesque" gestures of the Dwarf's choreography during the performance.⁵¹³



Figure 5.1 — *Der Geburtstag der Infantin*, poster for 1910 reprise by Erwin Lang.⁵¹⁴

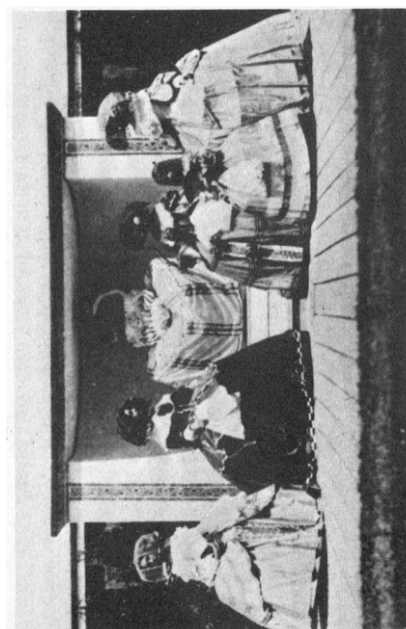


Figure 5.2 — Photograph of the original production of Schreker's *Infantin*, Vienna *Kunstschau*, 1908.⁵¹⁵

According to Sheinberg, the grotesque appears as the result of an "unresolvable contradiction",⁵¹⁶ or as Stallybrass and White state, from "a process of hybridization or inmixing of binary opposites [...] usually perceived as incompatible";⁵¹⁷ the distorted gestures of Schreker's Dwarf, then, are not grotesque in themselves, but become so through the striking contrast between the character's elegant physical appearance and musical portrayal. A similar disjunction between the visual and the aural encourages a grotesque response in Zemlinsky's *Zwerg*: Zemlinsky's Dwarf is no longer a 'dancer', but has been brought to the Infanta's court to sing. His ugly appearance (see the costume sketch for the Cologne premiere, figure 5.3) forms a grotesque contrast to his lyrical *Heldentenor* voice and the expansive post-romantic orchestral idiom that accompanies him. Unlike Schreker's work, with its

⁵¹³ See preface to Universal Edition score 31426, in Hailey (2002, V).

⁵¹⁴ Taken from Hailey (1993, 30).

⁵¹⁵ Taken from Schorske (1981, 326). Schorske identifies the photograph as a performance of Wilde's play from the Vienna *Kunstschau*, but does not mention the composer, which is now known to be Schreker.

⁵¹⁶ Sheinberg (2000, 28).

⁵¹⁷ Peter Stallybrass and Allon White, quoted in Athanassoglou-Kallmyer (2003, 284).

virtually unchanging orchestral style throughout, Zemlinsky uses different orchestral styles for their dramatic function, contrasting that of the Dwarf with the “Neo-classical”⁵¹⁸ orchestral setting accompanying members of the Court.



Figure 5.3 — Costume sketch by August Haag for the premiere of Zemlinsky's *Der Zwerg* (Cologne, 1922).⁵¹⁹

Recent theorists of the grotesque, developing Bakhtin's work on the subject, are keen to emphasize not only its paradoxical mixing of binary opposites, but that these binary opposites are frequently concerned with the idea of “high and low”⁵²⁰ cultural stereotypes:

To define the grotesque, then, as a process of hybridization is not to neutralize its role as a kind of contestation. Rather, it is to acknowledge that the grotesque tends to operate as a critique of dominant ideology which has set the terms, designating what is high and low.⁵²¹

Following this idea of the ‘grotesque as critique’, a critique of what Bakhtin described as the “high, spiritual, [and] ideal”,⁵²² the timbral construction of Zemlinsky's opera evokes the grotesque on two distinct levels. Firstly, there are the occurrences of ‘vulgar’ and ‘crude’ instrumental effects, which are heard as such through the way they stretch and break the rules of standardized fin-de-siècle

⁵¹⁸ Hailey, quoted in Lee (2010, 211).

⁵¹⁹ Image courtesy of the *Theaterwissenschaftliche Sammlung Schloss Wahn*, Cologne (Inventory No. 3806). My thanks to Christina Vollmert for her help in locating this image.

⁵²⁰ Athanassoglou-Kallmyer (2003, 284).

⁵²¹ Ibid.

⁵²² Mikhail Bakhtin, quoted in Ibid., 89.

instrumental usage. These distorted instrumental ‘effects’ provide a grotesque contrast to *both* the late-romantic orchestral idiom of the Dwarf, and the neoclassical idiom of the Court; contextually, by exceeding accepted fin-de-siècle norms, such timbral gestures would be perceived as grotesque distortions by *all* listeners.

The second reading of the grotesque in Zemlinsky’s opera is generated by the contrast of the Court and the Dwarf — of ‘high’ and ‘low’. The Dwarf’s grotesque qualities have so far been attributed to the irresolvable contrast between his physical ugliness and the frequent timbral beauty of his voice and orchestral accompaniment. However, throughout the opera, and whilst there are some moments of overlap, Zemlinsky frequently juxtaposes the Dwarf’s post-romantic, rich orchestral timbres with the reduced neoclassical ‘mixed’ orchestration of the Court. Unlike the crude orchestral gestures mentioned in the previous paragraph, both styles follow accepted standards set out in contemporary orchestral treatises (see discussion in chapter 1), with both orchestral styles belonging to genres of ‘high art’ music. However, through the ‘unresolvable contradiction’ of the Dwarf’s visual and audible qualities (Sheinberg’s earlier criterion for the grotesque), his music gains grotesque associations; this combination of the ‘high’ and the ‘low’ is what George Harpham calls “combinatory degrading”.⁵²³ The result of this grotesque contextual ‘degrading’-through-association is the positioning of the Dwarf’s music as initially lower in status than that of the Court (whose refined visual appearance combined with a lack of timbral excess cause no initial disjunction or contradiction).

Zemlinsky’s choice of these two particular orchestral styles, placed in direct contrast with one another and with each assigned a different social status within the opera, mirrors the conservative standpoint in the ongoing fin-de-siècle debate regarding orchestral beauty and decadence: between the refined and ‘chaste’ ideals of Zemlinsky’s neoclassical timbres and the sensual ‘excesses’ of the post-romantic orchestra with the fear of such music’s ‘grotesque’ bodily force as something that needed to be controlled. However, we will see that by the end of the opera this straightforward contrast is called into question. The case studies in this chapter examine the use of these orchestral tropes in greater detail, alongside the timbral means by which, at the opera’s end, the music of the Court becomes sidelined and grotesque in a somewhat ‘uncanny’ reversal of status.

⁵²³ Harpham, quoted in *Ibid.*, 283.

5.1.2 — Uncanny Timbral Reconfigurations, or Defamiliarization, of the ‘Outsider’

A key concept in this analysis of Zemlinsky’s opera is the ‘uncanny’ nature of the changes that take place, framed through timbral means. Sherry D. Lee agrees that the uncanny is a central concept in the opera’s narrative, focusing primarily on the motivic and harmonic elements that convey this unsettling concept through differing character associations throughout the work.⁵²⁴ Like Lee, I have begun by outlining the “broad-brush strokes that delineate [the] general characteristics of opposing character types in the narrative”,⁵²⁵ but, in particular, I will focus primarily on the orchestral tropes that are used and then move on to analyse how their associations with the on-stage protagonists shift and change as the opera progresses. This sense of ‘defamiliarization’—the sense that associations, which appeared fixed at the start, are in fact fluid—is an important factor in driving the opera’s uncanny narrative forward. Lee’s discussion of the uncanny is particularly pertinent to our discussion when she observes that it is determined by the “subject’s projection of what is feared or dangerous in itself onto an Other, a demonic double, as a repressive defence mechanism”, as well as her suggestion that the “uncanny experience is characterized as much by its familiarity—the return of something known—as by the fearfulness of the repressed element”.⁵²⁶ It is the sense of “*re-cognition*”,⁵²⁷ as Lee puts it, which is important: the ‘feared’ or ‘dangerous’ element that shifts in association from one subject to another in a way that serves to de-stabilize, disquiet, and unsettle.

One of the ‘fearful’, ‘dangerous’ parameters that ‘requires repression’ in this fin-de-siècle Viennese context is, of course, the various orchestral configurations that deviate from the established and accepted inter-compositional norms of the time discussed in chapter 1. The previous sections have already established the parameters that broadly define the timbrally grotesque, but also—if following the established conservative fin-de-siècle Viennese narrative—that the other orchestral configurations that accompany the Dwarf are those that Viennese critics at the time would have considered sensual or excessive, and perhaps needed to be ‘repressed’.

⁵²⁴ Lee (2010, 208ff.).

⁵²⁵ Ibid., 211.

⁵²⁶ Lee (2005, 209).

⁵²⁷ Ibid., my emphasis.

Richard Cohn's *Uncanny Resemblances: Tonal Signification in the Freudian Age* discusses the uncanny with specific focus on musical tonality: though it is another example of an overtly harmonically-determined reading, which almost entirely ignores timbre and register, its underlying ideas can be adapted toward the current discussion of Zemlinsky's contrasting timbral configurations and their potentially 'uncanny' effect. Cohn applies the uncanny label to a particular progression he calls a 'hexatonic pole', and, following the ideas set out in Freud's 1919 essay on the Uncanny ["*Das Unheimliche*"], explains that progression functions as it does from the simultaneous presentation of the alien and the familiar:

[Its] uncanniness must have something to do with the capacity of [its] constituents to associate with, but at the same time resist or defamiliarize, the musically comfortable and *heimlich*.⁵²⁸

Cohn's approach comes from Freud's formulation of the uncanny as that class of the unfamiliar which also "is known of old and long familiar".⁵²⁹ The co-existence of familiar and unfamiliar, comfortable and uncomfortable, bears strong similarity to the idea of the grotesque. However, of particular concern to the current reading of Zemlinsky's opera, is a process that Anthony Vidler refers to as "a disquieting slippage"⁵³⁰ between what is uncanny and not. For Cohn, Vidler's remarks highlight the "continuum on which the *heimlich* and *unheimlich* coexist, and the difficulty of discerning the moment when the border that separates them is traversed".⁵³¹

At the start of *Der Zwerg* the Dwarf is initially presented as a grotesque outsider and intruder, as *unheimlich*, and the music of the Court *heimlich*. I suggest that by the opera's end an uncanny reconfiguration of status has occurred, and the role of the grotesque outsider is now assigned to the Court. This changing subject-position is not simply one of dramatic context, but one that is timbrally motivated. The change is gradual, with no precise turning point (hence its 'uncanny' quality); however, I argue in my later case studies that once the changes have been established the effect observed can be attributed to various aspects of the work's timbral construction, gradually making the familiar unfamiliar, and vice versa. In particular, part of the uncanny effect stems from the way the same orchestra (the 'familiar' constant) produces, and un-naturally juxtaposes, the different

⁵²⁸ Cohn (2004, 318).

⁵²⁹ Freud, quoted in Cohn (2004, 290).

⁵³⁰ Vidler, quoted in Ibid.

⁵³¹ Ibid.

orchestral styles and timbral distortions. Of course, it is usual for timbre to vary within a piece, but it is not just that Zemlinsky's work juxtaposes contrasting timbral configurations, but that it takes the familiar timbral configurations of two familiar orchestral styles—with their contemporary historical associations—and puts them together in a way that is unnatural for the time. The uncanny effect stems from observing the split stylistic personalities of the orchestra—styles which would have engendered conflicting modes of response in contemporary audiences—and its unstable timbral identity, alongside shifting dramatic associations toward these orchestral topoi throughout the work. It is only from a fin-de-siècle Viennese perspective that these orchestral styles can be heard as diametrically opposed, rather than merely contrasting, timbral configurations.

Lee's earlier suggestion that the uncanny first of all requires the "subject's projection of what is feared or dangerous" onto "an Other" is at the heart of the analyses that follow. In Zemlinsky's *Zwerg* I would suggest that there are at least two 'subjects' doing the projection: from *within* the narrative, there are the members of the Infanta's Court who explicitly state their fear and displeasure regarding the Dwarf's outward appearance (a projection that essentially remains static throughout the opera). In contrast, I suggest that the 'subject-position' of the fin-de-siècle audience toward the Dwarf fluctuates as the drama unfolds and, in particular, that it is frequently conditioned by the use of the orchestral and timbral tropes outlined so far. In doing so, orchestral and timbral associations work from within Zemlinsky's opera to change the status of the Court, rather than the Dwarf, to that of the 'outsider' or 'other', and they modulate this subject-position using the contemporary associations and arguments surrounding timbre and orchestration that fin-de-siècle audiences would have been familiar with (ideas of sensuality, decadence, and excess), even if they did not agree with such arguments themselves. Here is where the uncanny 're-cognition' is found: the examples in the case studies that follow provide evidence to suggest that, contrary to the norms established at the start of the opera, the grotesque timbral moments shift in association away from the Dwarf toward the Court. In addition, the way the Court's music is timbrally presented within the auditory scene at the close of the opera also suggests a subject-position that now presents the Court as having taken the Dwarf's place as the 'other' or 'outsider'. It is this 're-cognition'—the return of a familiar and safe element, but now with something to be 'feared'—that makes the end of Zemlinsky's opera dramatically effective, particularly from a fin-de-siècle context that considers the contemporary

debate surrounding the way timbre and the orchestra was used. This shift in subject-position follows many of the requirements necessary for it to be characterised as ‘uncanny’, but at the very least it can be classed as a ‘defamiliarization’ of what the opening of the opera set up as ‘familiar’, or the unsettling addition of ‘feared’ or ‘dangerous’ elements to that which was initially considered ‘safe’. In analyzing the orchestral-timbral presentation of such shifting associations in *Der Zwerg*—grounded in fin-de-siècle responses to timbre—a change in subject-position can be shown and its dramatic implications given whilst remaining historically contextualised.

5.1.3. — Breakthrough, Immanent Self-Critique, and the Timbral Outsider

The numerous timbral intrusions of the Dwarf provide a dramatic and disjunctive contrast to the neoclassicized orchestral setting of the Court. At these moments Zemlinsky’s use of contrasting timbral tropes provides examples of Adornian breakthrough, or Abbatian rupture. Like the previous examples of breakthrough discussed in the thesis, such moments create points of narrative disjunction. In the case of *Der Zwerg*, however, Adorno’s formulation of the category of breakthrough is particularly pertinent. As chapter two outlined, breakthrough is one of the compositional categories Adorno puts forward in his positive appraisal of Mahler’s compositional style.⁵³² For Adorno, these categories of intrusion position Mahler’s music away from the commodity form and its “false appearance of integration and wholeness”, suggesting instead that it belongs to the *avant-garde* which takes “fragmentation and disintegration” as its “immanent law of form”.⁵³³ Important for Adorno is that the modern artwork “does not accept the handed-down material as given, but questions it ‘immanently’ within its structure”.⁵³⁴ Such “intrusions”, writes Adorno, “irritate unquestioned tradition”;⁵³⁵ these formal ruptures “originate from beyond the music’s intrinsic movement, intervening from outside”.⁵³⁶ This equally describes the use of orchestral tropes in Zemlinsky’s *Zwerg*. Following Adorno’s viewpoint, the Dwarf’s timbral ‘intrusions’ emphasize, at the start, his ‘outsider’ status and critique, from within the music, the classicized norms that have so far

⁵³² See *Mahler: A Musical Physiognomy* (Adorno 1992), particularly chapters 1 and 3, and discussions earlier in this thesis.

⁵³³ See Paddison (1993, 54-55).

⁵³⁴ *Ibid.*, 55.

⁵³⁵ Adorno (1992, 27).

⁵³⁶ *Ibid.*, 5.

been introduced and associated with the Court. Adorno's essay on Zemlinsky⁵³⁷ focuses on his "eclectic" compositional style, but suggests that upon "closer scrutiny" of Zemlinsky's output the negative connotations of such a term should be reconsidered as "[w]e discover how effectively [for Zemlinsky] an alien style becomes a meaningful nuance".⁵³⁸ I argue that this is certainly the case in *Der Zwerg*, with the frequent 'intrusion' of contrasting orchestral styles serving to critique the idea that such timbral configurations are being used in a normative fashion, and as such this chapter's discussion partly functions as a critique of Adorno's specifically negative judgement of Zemlinsky's *Zwerg* ("...not enough substance"; "...degenerates into dramatic padding")⁵³⁹ by suggesting that the positive characteristics Adorno found in Mahler can too be found in the timbral construction of Zemlinsky's opera. For example, the following positive assessment of Mahler's style, by Adorno, is equally applicable to Zemlinsky's use of timbre in *Der Zwerg*:

[The figures of] Viennese classicism [...] shunned extreme contrast, without which the Mahlerian whole would not be formed. [He] looks for support not only in declining *late Romanticism*, but above all in *vulgar* music. This offers him crude stimulants that the selective taste of higher music has rejected..."⁵⁴⁰

With these 'late Romantic' and 'vulgar' intrusions Adorno allies Mahler's music with the *avant-garde* in its criticism of the unified classical style, where "the concept of totality was the undisputed master".⁵⁴¹ As is the case with Mahler, the late-romantic and vulgar intrusions in Zemlinsky's opera are signified by the work's timbral configuration. Moreover, the ideological implications of Adorno's thought are more keenly felt in *Der Zwerg* as the dramatic setting explicitly deals with notions of class and status by initially placing the classicized timbral idiom associated with the Court as status quo, and the timbral 'intrusions' initially associated with Dwarf as 'outsider'.

At a time when responses to the manner of music's timbral construction were still discussed in social, moral and political terms, Zemlinsky's choice of the Court's neoclassicized orchestral style and the Dwarf's late-romantic, and sometimes 'vulgar', gestures conform to conservative fin-de-siècle Viennese judgements of about the way the orchestra should be used. In doing so, Zemlinsky reconfigures traditional boundaries of orchestral categories of beauty and ugliness as not merely

⁵³⁷ Written in 1959, published as part of the essay collection *Quasi una Fantasia* (Adorno 1998, 111-30).

⁵³⁸ *Ibid.*, 122.

⁵³⁹ *Ibid.*, 125.

⁵⁴⁰ Adorno (1992, 50), my emphasis.

⁵⁴¹ 'Mahler', in *Quasi una Fantasia* (Adorno 1998, 87).

between the grotesque timbral gesture and its normative opposite, but also between two orchestral styles considered equally 'beautiful' to current audiences, but which in fin-de-siècle Vienna were at the heart of a debate on musical aesthetics.

Whilst the dramatic setting of Zemlinsky's opera initially positions itself as mocking the deformed excesses of post-romantic orchestration and its 'grotesque' gestures—seemingly aligning itself to a conservative standpoint—the following three case studies exemplify how the timbral construction of *Der Zwerg* eventually undermines such a subject-position, both in its 'modernist' self-critique (through moments of narrative disjunction and breakthrough), but also through more 'uncanny' *defamiliarizations* of the familiar via shifting associations of the musically grotesque from Dwarf to Court.

5.2 — Musical Case Studies

5.2.1 — Uncanny Shifts in Association of the Timbral Grotesque

This chapter's opening highlighted *Der Zwerg's* minimalized, but central, use of the timbrally grotesque. Whilst other timbral qualities are responsible for more complex effects, I have purposefully delayed the discussion of *their* usage for the two case studies that follow as, first, I aim to examine the timbrally grotesque in isolation and suggest its deployment is not as straightforward as others have implied.

Sherry D. Lee describes such grotesque gestures as "representation[s] of the Dwarf" that are often "directly mimetic", citing the orchestral gestures accompanying the Dwarf's first entry as exemplification (figure 5.4a). Here, the timbrally grotesque is found in the strings' glissandi gestures played at the bridge to increase the roughness of tone; this 'improper' playing of the instruments gives rise to the grotesque effect. In addition, the inclusion of parallel fourths (an example of 'improper' voice-leading) in clarinet, second violin, and oboe parts, adds to the grotesque effect, harmonically. Similar gestures were heard bars earlier when the Infantin's Majordomo described the Dwarf prior to his appearance (cf. figures 5.4a and 5.4b).

88 *Sehr gemessen*
♩ = ♪ (Viertel schlagen)

1.2. Ob.
E.H.
1.2. Kl. (B) *hervortretend*
1.2. Fg.
3.
4. Hr. (F)
1.2.3. Pos. *[p] zu 3*
Btb. *Dämpfer ab*
gr. Tr.
Hf.
Der Zwerg steigt aus
VI. I *zus., ganz am Steg gliss.*
VI. II *2fach get., ganz am Steg gliss.*
Br. *ganz am Steg gliss.*
Vc. *ganz am Steg gliss.*
Kb. *pizz. p*

Figure 5.4a — *Der Zwerg*, [88]–[88]⁺¹, timbrally ‘grotesque’ gestures accompanying the Dwarf’s first entry, UE 17571

54⁺² *Etwas ruhiger die*

1.2. Kl. (B)
Bkl. (B) *pp*
1.2. Fg. *p*
3. Pos. *mit Dämpfer gleichsam: glissando [p]*
Gh. 1. Zo. *p leise, erstaunt*
Scheuß-lich, das Schön-ste? So re-de doch!
2.3. Zo. *p leise, erstaunt*
Scheuß-lich, das Schön-ste? So re-de doch!
Hfm. *scheuß-lich!*
Br. *gliss.*
Vc. *gliss.*
Kb. *pp*

Figure 5.4b — *Der Zwerg*, [54]⁺²–[54]⁺⁵, the Majordomo’s describing of the—as yet unseen—Dwarf, UE 17571

Whilst the texture is thinner here, the string glissandi in cello and viola and the inclusion of the muted glissandi trombone provides clear examples of the timbrally grotesque.

The process of uncanny reconfiguration, or defamiliarization, begins when the Dwarf is first asked to sing. Of course, the Dwarf *has* been singing in the brief time since his appearance—this is an opera. However, following the Infanta's direct request and the Dwarf's response, "*Ja, Ich will singen...*" (rehearsal no. [96]), the melodic range of his vocal part shifts upward, its altered tessitura and lyrical phrasing takes on the timbral qualities of an operatic *Heldentenor*. Such a change in vocal tessitura, accompanied by an equally lyrical and more expansive orchestral accompaniment (devoid of any grotesque gestures), functions as a moment of Abbatian narrative disjunction, a *performative* gesture, suggesting that the Dwarf's singing has shifted from the noumenal (which only the audience are privy to) to the phenomenal (music heard by both audience and those on stage).

The Dwarf's songs, or 'moments of singing', are constructed timbrally (and here I include the tessitura of the Dwarf's voice alongside the orchestral configurations) to conform to early twentieth century operatic vocal and orchestral conventions associated with the heroic tenor figure, conventions in stark contrast to the grotesque orchestral gestures heard previously and the Dwarf's physical appearance.

The uncanny reconfiguration of grotesque associations is complete when, following the end of the Dwarf's 'beautiful' song, the Court members begin to mock the Dwarf, accompanied by numerous timbral distortions and grotesque gestures—*ff* muted brass, flutter-tonguing, pizzicato, *col legno*, extremes of tessitura and dynamics—all compounded by awkward melodic leaps, fragmentary motifs and diminished harmonies based around the tritone (see [115]²–[121]). Until this point the timbrally grotesque had been solely associated with the Dwarf. However, the absence of the grotesque in the Dwarf's own music destabilizes what had appeared fixed, a defamiliarization of the familiar. The re-entry of the Court after the Dwarf's song, with their grotesque gestures, completes the uncanny reversal: the realization that the Dwarf has not been the source of the timbrally grotesque, that the grotesque gestures have not 'directly mimicked' the Dwarf—as Lee suggested—but rather that in both cases the grotesque gestures portray the negative attitude of the Court members *toward* the Dwarf, that agency of the musical grotesque in fact lies with the *Court*. A second look at figures 5.4a & b also emphasizes the validity of this subject-position, as it is at the moment

where the Majordomo *describes* the Dwarf (5.4b) that arguably the most distorted timbre of the muted glissando trombone is present, leaving the music accompanying actual entry of the Dwarf (5.4a) to sound less distorted by comparison.

This revised subject-position is emphasized as the Dwarf interrupts the Court's grotesque response, described above, in a moment of timbral breakthrough (see appendix 5a, [121]⁵⁴²). The grotesque timbral gestures of the orchestra suddenly cease, and the Dwarf climbs once more into the upper tessitura of the *Heldtenor* range (marked *sehr warm*), sustaining a high B^b. This sudden juxtaposition foregrounds the lack of the timbral grotesque in the Dwarf's music, more obviously than has so far been the case. Through the uncannily reconfigured association of the grotesque gesture with the Court, the timbral configuration of Zemlinsky's *Zwerg* begins to destabilize the social hierarchy inherent in the dramatic setting of the royal court by shifting the association of the 'low'-status grotesque timbral gestures away from the Dwarf and toward the 'high'-status members of the Court; such juxtaposed associations of high and low begin Harpham's process of combinatory degradation with regard to the unquestioned status of the Court.

Whilst analysts such as Julie Brown marginalize the use of these "inappropriate sonic effects" in their study of the musical grotesque,⁵⁴² and even though the timbrally grotesque makes relatively few conspicuous appearances in *Der Zwerg*, the above analysis of their uncannily changing associations has implications for the social status of the characters within the opera, given the timbrally grotesque's 'vulgar', 'crude', and generally 'low' status. In an opera explicitly concerned with social status and issues of beauty, the timbral grotesque plays an important role in deconstructing expected norms of social hierarchy stipulated by the dramatic plot: that of the 'low' Dwarf, and the 'high' Court.

Through the uncanny reconfiguration of the Court as *agents*, rather than observers, of the timbrally grotesque their unquestionably high social status is undermined. In this first case study it has been the inherently 'low' status of the timbrally grotesque, and the immediacy with which such distortions are perceived within the musical texture, that have formed the foundation for the uncanny undermining of the Court's position that the opening scenes put forward. The second case study examines, through other aspects of the work's timbral construction, how the opera's closing

⁵⁴² J. Brown (2007, 2).

scenes follow the downward trajectory implied by these opening moments and suggest the diminished status of the Court to that of ‘outsider’ — the position occupied at the opera’s opening by the Dwarf.

5.2.2 — Uncanny Timbral Reversal of the Outsider

Following the Dwarf’s expression of love for the Infantin he rushes off-stage to the ballroom to await their first dance. The Infanta and her chief maid, Ghita, endure a brief conversation before following him, at which point the stage is left entirely empty of *dramatis personae* for over a minute and the pit orchestra falls silent. Lacking any on-stage action, audience attention is instead directed toward the triple-time dance music played by off-stage orchestra (see appendix 5b). Zemlinsky’s use of off-stage band may, initially, merely appear to be a convenient theatrical device used to avoid the difficulties of staging an elaborate set change to an extravagant ballroom scene within a single-act opera. Clearly, the use of contrasting off-stage music is not new or unique to *Der Zwerg*. However, the use of the off-stage orchestra has specific dramatic significance for the rest of this particular opera in its function as metonymic signifier for the members of the Infanta’s court. Following this point in the opera the most dramatic scenes of the opera occur: the Dwarf’s recognition of his own physical ugliness, and his subsequent death. Such scenes of intense emotional outpouring, accompanied by an expressionist-romantic orchestral idiom, are made tragic by their grotesque juxtaposition with musical references to the distant, ‘anempathetic’ music of the off-stage Court’s orchestra. Chion’s concept of anempathetic music refers to that which shows “an ostensible *indifference*” to the intense emotional situation on screen (in this case, on stage) by “following its own dauntless and mechanical course”.⁵⁴³ The off-stage music functions anempathetically both with its simple, repetitive (‘mechanical’) melodic fragments and rhythmic accompaniments, but also in its reduced timbral construction and removed physical distance from the events on-stage, intruding from ‘outside’ the centre of dramatic action.

The clearest example of this grotesque juxtaposition is found in the opera’s closing bars, where, at the moment of the Dwarf’s death, the sound of the off-stage orchestra intrudes from the

⁵⁴³ Chion (1994, 123).

distance playing a short fragment of the dance music from the earlier scene. Following this external intrusion, a full-orchestral tutti from the pit-orchestra brings the opera to a close (see appendix 5c). That the music of the off-stage band remains unchanged since its first appearance seems to imply that the Court remains untouched by the Dwarf's departure, and provides an anempathetic soundtrack to the tragedy on stage. This sudden juxtaposition of frivolity and death creates an irresolvable contrast of low and high resulting in a moment of grotesque tragedy. Since its first appearance, the Court's off-stage music has undergone an uncanny contextual reconfiguration from simple, classicized dance accompaniment to a source of grotesque contrast. Unlike the first case study's uncanny reconfiguration of the grotesque Court, this example does not involve the timbrally grotesque, but rather a moment of grotesque contrast afforded by its estranged timbral presentation as well as its anempathetic upbeat rhythmic and melodic construction. If it was not for the Court's distant presentation via its reduced timbral means, originating from its off-stage placement in contrast with the fuller timbral palette of the pit orchestra, the sense of cruel contrast between the Court and the Dwarf would not be achieved. The contrasting spatialization and timbral configuration of the two orchestras plays a prominent role at this point in the drama.

Though important to the drama, this example results from a familiar contrast between on-stage and off-stage orchestra. However, further examples can be found that make reference to the Court's off-stage dance music, which once again create moments of grotesque contrast through their anempathetic indifference to the intense emotional scenes taking place on stage, but this time they are not found in the off-stage orchestra and instead they are *timbrally configured* within the pit orchestra to *sound* physically distant.

The examples that follow make reference to the off-stage dance through melodic and rhythmic motivic fragments, but the sense of physical distance is created not through the use of off-stage orchestra, but through carefully orchestrated passages constructed to sound 'as if' in the distance. For instance, following the Dwarf's mirror scene the Infanta chastises him: "Stop crying! You must be joyful with me...". At this point (see appendix 5d, [271]²), motivic fragments of the dance music are played by two muted solo violins, marked '*nicht hervortretend*' [not prominent], 'scherzando', and 'without crescendo'. At the same time as these fragmentary intrusions, the music from the previous bars continues explicitly un-muted and at higher dynamic levels. Following the mapping of timbral-

auditory space set out in figures 3.8 and 3.9 of chapter 3, such a timbral-dynamic configuration places the violins' interjection in the background of the auditory scene, and the rest of the orchestral material as musical foreground. This specific manner of timbral configuration, mimicking the distant sound of the off-stage orchestra, allows two distinct musical *strata* to be heard within the auditory scene; without this auditory distinction the effect of the grotesque juxtaposition of anempathetic background and empathetic foreground would not be possible and instead the 'distant' intrusions would be heard as part of the foreground orchestral music associated with the Dwarf.

Similar fragmentary intrusions, made to sound distant through their timbral characteristics, are found in bar [277]⁻² and cause a moment of grotesque juxtaposition to occur at the point where the Infanta is disgruntled with the dying Dwarf, who is no longer fulfilling his function as light-hearted entertainer.

In addition to the distant Court's anempathetic dance music as cause of such grotesque contrasts, the characters immediately emerging from the off-stage dancehall do so accompanied by timbrally grotesque distortions of the motifs and gestures associated with its dance music: examples include the moment when the Infanta's maids re-emerge from the off-stage dance, mocking the Dwarf (see [196]⁺³—[198]⁻²); or later when the Infanta leaves the dance to find the absent Dwarf ([262]⁻⁵—[262]⁺⁵). Through these moments of timbral deformation and the earlier examples of the timbrally-framed anempathetically distant contrasts, the members of the Infanta's Court are now firmly established, narratively, as the opera's source of the grotesque. Moreover, the Court has taken on the role of the outsider, which at the start of the opera belonged to the Dwarf (through his moments of *Heldentenor*, late-romantic orchestral breakthrough juxtaposed with the Court's neoclassic orchestral idiom, which at that point was established as normative). Now, toward the opera's end, the timbrally distant fragments of the Court's music intrude upon the Dwarf's music; this reversal of hierarchy is compounded through Zemlinsky's subjecting of the Court's music to caricature, focusing on its essential characteristics and grotesquely distorting them in the ways described above. After its initial appearance, the Court's dance music is never heard again in full, but returns in melodic or rhythmic fragments that are frequently subject to timbral distortion. One of the most explicit examples of this uncanny reversal, or defamiliarization of the Court through the addition of the timbral grotesque, is the music accompanying the Infanta's statement "I want to

dance and play with you but I can only love a man and you — are an animal!”. This moment occurs soon after the Dwarf has seen his reflection in the mirror and immediately after his declaration “I am a Dwarf, and I love you”. The Dwarf’s statement is accompanied by full orchestral timbres of the post-romantic orchestral palette. In contrast, we can see from the reduction below (figure 5.5) that the Infanta’s immediate response not only contains particularly dissonant harmonies, but uses a timbrally-grotesque chamber ensemble as well. The combination of trombones in their lowest tessitura playing a chromatic cluster alongside a dissonant cluster in the bassoons serves to create a sound that fin-de-siècle Viennese audiences would have considered ugly. The combination of these low crude ‘eructations’ with the contrasting timbre of the piccolo in its high tessitura adds an element of the comic that in the dramatic context becomes tragic. Zemlinsky’s choice to use the wind instruments that have more harsh timbres (piccolo, and the double-reeded oboe and bassoon) adds to the grotesque nature of the ensemble’s sound. The final element of the timbrally grotesque at this point is the increased timbral ‘noise’ from both the use of tremolando in the double basses, and the extremely quiet (*ppp* and *pppp*) dynamics in the lower instruments. At such low dynamic extremes, the pitch quality of the note becomes less prominent and elements of timbral noise become more noticeable.

Mäßig bewegt. (die ♩. wie die ♩. des vorangegangenen Taktes.)

Die Infantin (angstvoll, leise).

Ich will mit dir tan - zen und spie - len,

Figure 5.5 — The Infanta’s reaction to the Dwarf, with timbrally ‘grotesque’ accompaniment (*Der Zwerg*, Reh. [276]¹²), UE 6630

This transformation of the ‘high’ status of the ballroom dance into the ‘low’ art of caricature is once again a gradual and uncanny process of defamiliarization that has been found throughout *Der Zwerg*, and it is through *timbral* transformation and shifting subject position that this defamiliarization is

accomplished. In *Der Zwerg*'s final scene post-romantic timbral tropes are placed centre stage, with neoclassical references placed timbrally in the distance — distorted and fragmented to function as an external intruder. At the moment when the Dwarf confronts the Infanta about his appearance, the grotesque elements are no longer a part of 'his' music (as they *seemed* at the beginning of the opera), but finally come to be associated instead with the Infanta (figure 5.5, above) and her Court (i.e. that the notion of the grotesque remains stable, but it becomes associated with an alternative character).

Lee's discussion of Zemlinsky's opera focuses on the grotesque and uncanny music associated with the Dwarf's character alone. These first two case studies redress the balance of this one-sided portrait by suggesting that Zemlinsky's use of the grotesque is frequently associated with the *Court*, and that by the opera's end the uncanny reconfigurations of the grotesque's associations destabilize the social hierarchy set out at the start of *Der Zwerg*, undermining the Court's status by timbral means.

Lee's thorough account is convincing, but at certain points it misses an important parameter fundamental to the piece's dramatic narrative and with which fin-de-siècle Viennese audiences would have been familiar: the opera's contrasting and varied orchestral-timbral construction. Initially, the timbral construction of *Der Zwerg* does seem to undermine her central thesis regarding the Dwarf's sense of self-recognition. For example, after the fleeting dramatic mirror scene's harsh full-orchestral *tutti*, there is no use of the timbrally grotesque in any of the Dwarf's scenes where he is alone, and instead his music seems to follow fin-de-siècle post-Romantic orchestral conventions.

Lee takes Paul Ricoeur's *The Course of Recognition* (2005) as the source of her central theory that full recognition follows three stages: knowledge, self-recognition, and the dependence of self-recognition on the recognition by others.⁵⁴⁴ For the Dwarf, the problem is one of self-recognition, and from a timbral perspective, even after the mirror revelation has occurred (the moment of 'knowledge'), there is virtually no sense of the timbrally grotesque within the Dwarf's music. This sense of 'self-denial' runs against the central concept of self-recognition Lee advances. In addition, the final stage—'recognition by others'—is further complicated by this chapter's timbral analysis. A straightforward reading of the opera's text shows members of the Court and the Infanta fulfilling

⁵⁴⁴ See discussion of Ricoeur in Lee (2010), particularly pages 200-2, and 215.

this criterion as they all describe the Dwarf's ugliness. However, by the opera's end the 'ugly' timbral tropes have become firmly associated with the Court, independent of the Dwarf. The changing association of the timbrally grotesque throughout the course of the opera has taken on a partial sense of the uncanny: the idea that the Court which initially seemed familiar has, toward the end of the opera, become defamiliarized by mixing its neo-rococo orchestral timbres with the timbrally grotesque. In doing so, the orchestral presentation of the final moments of Zemlinsky's opera creates a scenario where it is the self-recognition of the *Court* that is called into question. Who will provide the mirror for the Court to realise their grotesque nature? For the fin-de-siècle audience this mirror comes in the form of the Dwarf, whose continuing lack of the timbral grotesque, the orchestral positioning of the Court as his 'Other', and the contemporary narratives surrounding post-romantic and neo-rococo orchestral tropes, provides the contrast required.

5.2.3 — Forbidden Enchantments

So far the chapter has emphasized that the opera's opening sections establish norms and hierarchical structures that are later undermined by predominantly timbral means — e.g., the distancing of the neo-rococo orchestral tropes of the Court and the changing associations of the timbrally grotesque. This final case study continues with the general theme of unstable social hierarchies, but alters the focus from grotesque moments of repulsion to moments where the work's timbral construction affords moments of attraction and enchantment through a comparison of the Infanta's fascination with the table full of beautiful birthday gifts against the enchanting qualities of her final gift, the Dwarf.

The Infanta's admiration of her birthday table, full of luxury items, occurs soon after the opera's beginning. Here, in a moment of Adornian Suspension, a single whole-tone harmony is sustained and all harmonic forward-movement is lost (see appendix 5e, [42] onwards). Like Dahlhaus's concept of the *Klangfläche*, this moment of harmonic and timbral contrast stands in "dialectical contradiction to the temporal structure" of the music surrounding it, in a moment of stasis. However, were the extract to lack the "internal motion" created by its variegated timbral

construction and multiple ostinati, the contrast “would merely sound dull and lifeless”,⁵⁴⁵ and not create the sense of interest and enchantment required at this point in the opera. The prominent use of celesta and harp evokes timbral topoi commonly used as signifier for the enchanting musical presentation of glittering jewels or objects (remember, for example, the discussion of Dukas’ *Ariane et Barbe-bleu* in chapter 3). Such moments, placing emphasis on timbral configuration rather than melodic, motivic, or harmonic development, were frequently subject to the negative conservative judgements outlined in chapter 1, such as those by Paul Plüddemann who remarked that he was “unnerved” by the “Kaleidoscope of hashish-intoxication”: a description that he felt adequately portrayed the enchanting effect of the opening Schreker’s *Kammersymphonie* with its contrasting harmonic stasis and internal motion through timbral variegation.⁵⁴⁶

In contrast to the Infanta’s table of gifts, the Dwarf enchants not by moments of Suspension and temporal stasis, but primarily through the timbre of his voice, whose *Heldentenor* quality strongly contradicts expectations based on his physical appearance. Nina Athanassoglou-Kallmyer, following Bakhtin, suggests a “popular propensity toward repulsive physicality” at events such as the carnival, where the grotesque can be seen “as a symbol of the undaunted, freedom-loving folk in rebellion against the dominant political forces aligned with classicism”.⁵⁴⁷ Those watching *Der Zwerg*’s opening scenes are presented with a setting not dissimilar from the ‘carnavalesque’ as each of the Infanta’s human gifts processes in and performs. Finally, with grotesque fascination, the audience and on-stage Court listen to the ugly Dwarf sing with a vocal timbre normally reserved for grand opera’s beautiful heroes. The importance of vocal timbre and tessitura within the opera, as partial signifier of beauty or ugliness, can be viewed as an amplification of the opening scene between the Majordomo, Ghita, and the three maids as the Majordomo is mimicked by the females after he sings about the importance of the Infanta’s birthday table:

⁵⁴⁵ Dahlhaus (1989, 307).

⁵⁴⁶ “...mit dem Kaleideskop des Haschischrauschen zu entnervt”. Remark taken from Paul Plüddemann’s review of Schreker’s *Kammersymphonie*, 22 March 1918, in the *Breslauer Zeitung*. Refer to chapter 1 for full citation.

⁵⁴⁷ Athanassoglou-Kallmyer (2003, 284).

Ruhig, gemessen ♩ = 112

ceremoniously 6⁻¹

Majordomo

den Ge-burts-tags- tisch__ der gnä-dig-sten In - fan - tin.

mimicking 7⁺²

Ghita, and
the 3 maids

Der Ge-burts-tags- tisch__ der gnä-dig-sten In - fan - tin.

Figure 5.6 — *Der Zwerg*. The mocking of the Majordomo by the Infanta's maids in uncomfortable tessitura.

The maid's response lies uncomfortably low in the soprano register, giving it a strained, 'ugly' character in many performances. The Dwarf, on the other hand, is frequently required to sing lyrically in the upper register of the tenor range, at times with full orchestral accompaniment (an aspect of the work that hindered early performances).⁵⁴⁸ In *Der Zwerg* (perhaps more so than in other works), the opera's dramatic success *requires* that the Dwarf not only *reach* the high notes but that the beautiful timbre of the tenor's voice is maintained in this upper tessitura, forming a contrast to his physical repulsiveness through which a sense of grotesque fascination is created. Without such fascination and enchantment the sense of tragedy at the opera's close would be far less great.

—*Opera, or the Undoing of Dwarves...*—

Opera, writes Susan McClary, frequently “demands the submission or death of the woman for the sake of narrative closure”.⁵⁴⁹ Her remarks are found in the foreword to Catherine Clément's book, *Opera, or the Undoing of Women*, which takes as its central thesis the idea that nineteenth and early twentieth century operatic plots reinforce male hegemony and the undervaluing of women. The problem, writes Clément, is not that women are forbidden a role in opera, but that “the moment [opera's] women leave their familiar and ornamental function, they are to end up punished — fallen, abandoned, or dead”.⁵⁵⁰

Zemlinsky's Dwarf enchants and fascinates in a way that oversteps the stable, 'safe' boundaries of the enchanting objects found on the Infanta's birthday table. There, the moment of enchantment

⁵⁴⁸ “Plans for a production with the celebrated heldentenor Fritz Windgassen at Stuttgart in 1930 foundered on the tessitura, which he found too high; similar problems thwarted Pella's intention of staging the work in Aachen.” Beaumont (2000, 313).

⁵⁴⁹ McClary, quoted in Clément (1989, xi).

⁵⁵⁰ Clément (1989, 7).

was an intoxicating, but distinctly self-contained moment of Suspension. In contrast, the grotesque fascination with the Dwarf throughout the opera eventually threatens to undermine the Infanta and her Court, as exemplified in the earlier case studies. As a result, one might view *Der Zwerg* as a convincing counter-example to Clément's thesis: female Infanta in-charge; male Dwarf oversteps 'safe' limits; Dwarf dies. However, various aspects of Zemlinsky's opera confuse this interpretation. Lee notes, for example, that the straightforward masculinity of the Dwarf "as spectacle" is undermined through his placement in "the feminine position of object of gaze" (of course, this viewpoint, following Laura Mulvey's influential essay, assumes the pre-dominance of the male heterosexual spectator).⁵⁵¹ In addition, Lee cites the Dwarf's song about the orange and the hairpin, suggesting that the lyrics place the Dwarf

in a passive, feminine sexual position, that of the orange being penetrated by the hairpin [...] a drastic reversal of the 'normal' libidinal economy by assigning the phallic role of penetration to the explicitly feminine position: that of the maiden who wields the pin.⁵⁵²

However, the Dwarf's destabilized masculinity is mirrored timbrally in the unstable femininity of the Infanta. George Klaren, the opera's librettist who 'freely' modified Wilde's story, transformed the Infanta from a child of 12 years to an adult of 18 (in his own words "not yet an adult but no longer a child").⁵⁵³ This dichotomy is presented orchestrally by the sudden and frequent switching of the Infanta's music from full-orchestral accompaniment to that of just a few instruments accompanied by simple thematic gestures on the celesta, reminiscent of a toy in a music box. One such example occurs at the opera's end, upon the discovery that the Dwarf, her "toy", is "broken", declaring "good, I will [return to the ball and] dance once more":

⁵⁵¹ Lee (2010, 30). Laura Mulvey's article 'Visual Pleasure and Narrative Cinema', *Screen* 16/3 (1975, 6-18), has been influential in film studies, suggesting that the dominance of male directors and cameramen translates on to the screen by the frequent presentation of women as objects of the scopophilic male gaze.

⁵⁵² Lee (2010, 30).

⁵⁵³ Klaren, 'Der Zwerg und was es bedeutet', *Kölnische Zeitung*, 17 June 1922, quoted in Lee (2010, 205).

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1.2.3. Fl. *ppp* *p dolce*

E.H. *ppp* *dolce*

I. Fg. *p* *pp*

Hf. *p* *pp*

Cel. Solo *p* *mf* *p*

In. *Infantin kindlich, naiv* *Sie eilt in den Saal.*
Gut, ich tan-ze wei-ter.

Vi. I mit Dämpfer, arco *ppp* *pp*

Vi. II mit Dämpfer, arco *ppp* *pp*

Br. * *pppp* *ppp* *ppp*

Vc. *pp* *ppp* *morendo*

Cb. *pp* *ppp* *morendo*

Figure 5.7 — *Der Zwerg*, moment of suspension and prominent use of solo celesta, UE 17571

Here, the moment of harmonic stasis, with its contrasting ‘internal motion’ (from celesta, harp, and flute gestures) suggests not only that this moment portrays a childlike naivety by the use of the celesta, but that the Infanta ‘enchants’ in much the same way as the glittering jewels and toys found on her birthday table. This is familiar fin-de-siècle enchantment scoring often found elsewhere, such as the music representing the crystal rose in the second act of Strauss’s *Der Rosenkavalier*, where static harmony is accompanied by a motif where celesta, harp, flute, glockenspiel and triangle are prominently used:

Figure 5.8 – Richard Strauss’s *Der Rosenkavalier*, Act II, Reh. [26]²: a moment of fin-de-siècle timbral enchantment, showing static/suspended harmony, but in particular the use of celesta, harp, flute, glockenspiel and triangle, BH 19500

The neutralized sexual identity of the Infanta and the feminized status of the Dwarf problematizes *Der Zwerg*’s status as a counterexample to Clément’s thesis. In addition, the “feminine” status of “sensual” late-romantic orchestration in contemporary Austro-Germanic circles—highlighted by Karen Painter’s work⁵⁵⁴—suggests that *Der Zwerg* not only follows Clément’s pattern, but requires the ‘death’ of the feminine, sensual, and therefore ‘dangerous’, post-romantic orchestral idiom as it threatens to undermine the stability and dominance of the opera’s moments of neoclassical orchestration.

—“*The Dwarf, however, really was quite irresistible*” —

For Antony Beaumont, one of the difficulties with *Der Zwerg* is that it was “no longer in tune with the *Zeitgeist*”; following the collective tragedy of World War I “the tragedy of the individual paled

⁵⁵⁴ See discussion in chapter 1, and Painter (1995, 241ff.), Painter (1996, 130ff.), and Painter (2007, 101ff.).

into insignificance”.⁵⁵⁵ However, I would argue that on the basis of the evidence put forward in this chapter—through the opera’s deconstructive use of neo-rococo, post-romantic, and grotesque timbral topoi—Zemlinsky creates an opera that not only depicts the tragedy of an individual, but also provides a critique of issues that *were* relevant to 1920s Viennese society: changing attitudes toward social hierarchy, as well as changing attitudes to the excesses of orchestration. Zemlinsky’s opera consistently presents the Dwarf in a way that earlier Viennese audiences would have heard as ‘irresistible’ through his continual association with the ‘sensual’ (often overpowering) post-romantic orchestral style in contrast to the Court’s more ascetic neoclassical orchestral idiom. In this sense, Peter Franklin’s remark about Schreker’s *Die Gezeichneten*—that the work is “not only a symptom, but a contribution to [the] discourse *about* art and degeneracy”⁵⁵⁶—is perhaps more pertinent in relation to *Der Zwerg*. For whilst Schreker’s work *does* depict sensual excess through some extraordinarily dense and variegated timbral configurations, the critique of this sensuality comes only from the dramatic plot (the debauched acts the music accompanies are decried by the leading society figures in Schreker’s plot). However, Zemlinsky’s opera foregrounds a sense of dialogue between its contrasting orchestral tropes that appears to subvert or reverse fin-de-siècle views toward social hierarchy and to comment on one of the pressing debates in contemporary musical composition: orchestration. In this sense Zemlinsky’s opera is not ‘out of tune’ with contemporary artistic developments, but instead forms part of the critical debate surrounding the changing *Zeitgeist* of the early twentieth-century.

By 1922, the neoclassical trend had taken root in music as a reaction against the perceived excesses of (post-)romanticism. The post-romantic orchestral configuration was not one that Zemlinsky would soon give up (his next major work would be the *Lytic Symphony*), but *Der Zwerg* represents a point of wider identity crisis felt by a number of composers following World War I. Composers such as Schreker and Zemlinsky—used to writing for large orchestral forces—found themselves out-of-fashion and subject to accusations of excess, whose sounds may well have seemed ‘grotesque’ to a public who had just witnessed the tremendous economic and personal losses of that particular conflict. Zemlinsky’s opera, through its constellation of changing social inferences,

⁵⁵⁵ Beaumont (2000, 313).

⁵⁵⁶ Franklin (2006, 177).

provides a comment on fin-de-siècle Viennese standards of musical and physical beauty through its orchestration — not just through the use of the timbrally grotesque, but through an issue of contemporary aesthetic relevance: the changing status of ‘acceptable’ orchestration.

Zemlinsky’s opera pits the two orchestral styles against one another in a battle that neither really wins: the neoclassical timbres that introduce the work seem ascetic and emotionally artificial or restrained when compared with the intensity of the post-romantic orchestral idiom that repeatedly interjects; and the Dwarf, who functioned throughout as the agent of the post-romantic timbral tropes, is killed off in the opera’s final moments. The final tragic effect, then, is created not only through Wilde’s dramatic plot, but through the opera’s timbral configurations which literally and dramatically position the neoclassical music of the Court as distant and anempathetic to the stage action. The above analyses highlighted this timbral ‘positioning’ in the opera’s final scenes, arguing that the neoclassical music of the Court was—toward the end—always placed in the distance through timbral means. When the Court’s dance melodies become more raucous, such as the *molto espressivo, forte* clarinet solo in bar [186]³ (refer again to appendix 5b), their intensity and presence in the auditory scene is reduced by placing them off-stage (much like the second *ferne Klang* example in chapter 3). Also, as the example in part 5.2.2 showed, when these ideas later return, and are instead played in the pit orchestra, their presence is timbrally reduced, with their timbral profiles placing them (in accordance with the model set out in figure 3.9) on a more distant timbral stratum within the auditory scene, whilst remaining *physically* within the pit orchestra. It is these elements that engender a less empathetic subject-position toward the Court: their music is not to do with ‘us’, it is elsewhere, and the audience is only partially privy to that event through its distant sounds. This, and the earlier shifting timbrally-grotesque associations of the Court, suggests that when the Dwarf, as agent of the post-romantic timbral tropes, dies, all that remains is the negatively associated, distant, and anempathetic music of the Court. As a result of this timbrally configured subject-position, the Dwarf’s death appears more tragic from the sense of isolation that has been created without the aid of the more traditional tonal methods of unrelated key areas, or ‘uncanny’ harmonic progressions.

Zemlinsky’s opera ultimately questions the supremacy of the higher social classes, and functions as an immanent critique of accepted standards of orchestral beauty. It is important, therefore, to consider *Der Zwerg* as an important contribution to the *Zeitoper* genre. Finishing as it

does with the ‘death’ of the post-romantic idiom and a negative disposition toward the neoclassical, *Der Zwerg* appears to encapsulate the contemporary debate, and could therefore be viewed as a moment of compositional crisis for Zemlinsky. For a few more years he maintained a post-romantic orchestral style, but eventually, in works such as the *Sinfonietta*, op.23, he would find a style that synthesized aspects of the neoclassical and the post-romantic, offering his own personal response to the orchestration debate.

Alongside its role within the neo-rococo, post-romantic, and grotesque orchestral styles, the role of timbre in this opera has been to overwhelm and immerse, as well as to provide distance — in other words, to create perspective and subjectivity within the auditory scene. It has done this through the parameters described in figure 3.9 of chapter 3, and through the examples described above. This reading of Zemlinsky’s use of timbre refers back to the very beginning of this thesis where many critics negatively described the overwhelming sensual effect of powerful orchestration. Following the parametric map of auditory space that chapter 3 set out, it is easy to see why they might have had concerns: *any* quality or style of music can overpower or immerse the listener if its timbral configuration is powerful enough. All that it requires is that the aesthetic distance is reduced between listener and orchestra. With the expansive orchestras of the fin-de-siècle, this was relatively easy as the increased tessitura range and vast numbers allowed for easily increased dynamics across an extremely wide pitch range. Referring back to figure 3.9 it can be seen that this would result in the effect I have been describing above with the majority of the Dwarf’s music in the post-romantic orchestral idiom, i.e., that the sound would appear perceptually closer to the audience members, and in the most extreme cases would have the effect of surrounding or immersing the listener. For above a certain threshold the sound can appear to come from all around as one becomes more aware of the reflected sounds from the walls and ceiling of the concert hall itself. Smaller orchestras, such as the one found in Schreker’s *Der Geburtstag der Infantin* are unable to provide such levels of auditory immersion—not, at least, without the timbre becoming distorted through the extreme dynamics that such a situation would require. Perhaps, then, this is why Schreker’s work refrains from such timbral intensity until the moment of the Dwarf’s anguish, where distorted timbres—no longer distant in the auditory scene—form a dramatically appropriate contrast to the neo-rococo idiom that had been prevalent throughout.

Zemlinsky's *Der Zwerg* demonstrates the power of timbre both to immerse the listener in, and distance them from, the action on stage by splitting the auditory scene into different timbrally-governed strata. It is partially through this spatial interplay, alongside the contrasting use of timbre within the different orchestral styles, and partially through the use of 'grotesque' distorted timbres, that the work can be seen to comment upon the fin-de-siècle crisis of orchestration and the contemporary value judgements associated with them.

One of the repeated themes in this thesis has been to question the effectiveness of the piano transcription with regard to the music of fin-de-siècle Viennese composers. In this instance it is easy to see why its status was questioned: few of the analytical observations I have made in this chapter would translate effectively to the piano version. It is extremely difficult, for example, to distort the timbre of the piano so that it would sound 'grotesque' (in the sense that Julie Brown described it), especially at reduced dynamic levels. It would also be extremely hard for a pianist to mimic the timbral change from one orchestral style to another, especially at similar dynamic levels. Finally, it would be difficult to effectively distinguish between the different spatial strata due to the fact that each strand of the musical texture would be emanating from a single auditory point with a single timbral profile. This is not to say that different melodic *layers* are not perceptible on the piano, but rather that the spatial aspect (distant, close) would not be as easily marked. Without these elements Zemlinsky's opera simply does not function as the critique of fin-de-siècle musical and social values I have described. At the time Zemlinsky was writing *Der Zwerg* it is important to remember that the crisis in fin-de-siècle Austro-Germanic musical composition was not just one of tonality, but also a crisis of orchestration — of timbre. Zemlinsky's opera succeeds in not only making orchestral timbre a dramatic tool, but also part of the work's dramatic narrative. It is a narrative which highlights, through its modernist construction, the impasse felt by composers such as Zemlinsky and Schreker who continued to work within the post-romantic orchestral idiom when it seemed that those around them were holding up neoclassicism as a mirror that suddenly revealed their methods of orchestral construction to be grotesque, albeit in some ways 'quite irresistible'.

This thesis contributes to the wider analytical discussion through its examination and analysis of a critically neglected musical parameter in the music of an era that has been well-discussed in recent years. Its strength lies in the fact that it is not exclusively structured as a contextual historical survey or a number of abstract analytical case studies that take timbre as their focus, but rather as a synthesis of the two elements: it establishes contemporary contextual concerns in its opening chapters, adapting recent theoretical frameworks with which to analyze such concerns, with the result that the final analyses begin to contribute not only to our current understanding of how timbre works as a parameter, but also to a discussion of these pieces within a historically-grounded analytical framework.

It is this contextually-driven analysis of individual works that is this thesis's first main contribution and that has been fundamentally missing in many of the recent dissertations on the subject: Karen Painter's thesis (1996), whilst an in-depth historical survey, does not analyze the scores of Mahler's music in any detail; Lee Tsang's *Musical Timbre in Context: The Second Viennese School, 1909-1925* (2000) appears, from the title, to redress this balance, but focuses strictly on recent theoretical methods with the 'contextual' element being restricted to the individual narrative circumstances of each work's composition. A third category, exemplified by works such as Wayne Slawson's *Sound Color* (1985) or Fred Lerdahl's *Timbral Hierarchies* (1987), focus primarily on isolated tones and timbres (often artificially generated) in an attempt to create an overarching theory of timbre. These theories are then used to inform a new compositional strategy that concentrates specifically on precise timbral change. Studies like this can be viewed as a modern continuation of the discussion Schoenberg began in *Harmonielehre*, but they prove impossible to translate effectively to a timbral analysis of a piece of orchestral music. Only John Sheinbaum's thesis (2002) attempts such a contextual grounding of analysis in contemporary fin-de-siècle thought. The current thesis adds to that discussion in that it considers the wider fin-de-siècle response to a variety of composers. Furthermore, in response to Rose Subotnik's question posed in the opening preface, it does not take

structural listening as its sole analytical framework but also examines the effect of individual timbral moments in isolation.

The findings in this thesis reflect why musicology has no synthesising metatheoretical model for timbre (as it does, say, for pitch). It is unable to be abstracted in the same way. Besides, the desire for analysis to treat musical parameters as autonomous criteria for study has passed. Therefore the time is right for a more nuanced approach, examples of which this thesis has put forward.

Timbre is a difficult element to pin down, and this thesis has contributed by highlighting, at the outset, the fin-de-siècle 'crisis of response' to timbre and that, even now, current analytical responses to timbre (a 'secondary parameter' of secondary importance) can, in part, be seen as an inherited standpoint from fin-de-siècle Viennese musical politics and the influential analytical theories that grew out of that wider geographical focal point. It is the difficulty in abstracting timbre into a coherent theoretical model that partly explains the critical interest it received at the fin-de-siècle and also the renewed interest in the parameter in current musicology.

The above comments highlight this thesis's second main contribution: that we cannot create a universal or systematic model for timbre that is applicable to any situation. It is a messier, more unstable category than pitch, rhythm, or harmony. However, rather than using this as an excuse to neglect timbre as an analytical parameter, the overarching methodological principle has been to open up this parameter for interpretation (whilst being contingent on the historical questions this that thesis put forward) by looking at how timbre functions in specific musical contexts through a variety of contrasting case studies, each of which asked different questions and required a slightly different analytical approach.

Whereas Sheinbaum takes the score as his point of reference, and Tsang focuses heavily on the acoustic properties, this thesis's approach is often to combine both aspects and frequently adopts an ecological perspective that uses the score as a guide. In fact, many of my analytical responses to these works initially began from trying to evaluate the discrepancy between what is heard and what is present in the score (note that, because part of my criteria for choosing the analytical examples in this thesis was that these 'discrepancies' be present across various performances of the work

discussed, I have not included any specific sound examples. On the rare occasion that I refer to a specific performance of a work, it has been clearly referenced in the text).

The problem with any historically-contextualised analytical approach is that we only have ‘modern ears’, and it is important to acknowledge that though my analytical observations here are strongly grounded in contemporary fin-de-siècle responses to timbre, there will always be a gap between how contemporary listeners conceived of the music I have discussed and the historiographical context I have described here. The satisfying struggle has been in the attempt to reduce the size of this gap as much as possible. As was said at the end of chapter 2: even a Neo-Riemannian or Schenkerian analysis is written from the perspective of the modern analyst, even though they are using historically-grounded tools to do so. Even where the reverse is true and a modern theoretical toolset is being used (e.g. the various ecological models discussed) this should not imply that the analyses which take place are innate, or self-evident, responses to the works in question; in fact, it is mark of the success of many of the analyses that they require the modern listener to adopt a fin-de-siècle Viennese standpoint before the added analytical value of the work’s timbral construction can be made apparent. This is particularly true of the analysis of orchestral beauty in *Der Zwerg*, chapter 5; of the recurring timbral tropes found in the Viennese musical night scenes, chapter 4; and of the importance of the role of contemporary visual art in assessing timbre’s spatial contribution to music, in chapters 2 and 3.

This thesis’s overarching methodological principle is to open up the musical parameter of timbre for interpretation whilst being contingent on various historical questions and themes. Looking in this way, one starts to think about new elements to analyse. Its aim is not really about ‘tying together’ disparate analyses into one grand theory, but rather about modelling a set of data in a way that asks questions and becomes *another stage* in the interpretation of a particular work.

The thesis began by contributing a more in-depth view of contemporary fin-de-siècle Viennese responses to timbre and in its drive to understand what the dominant responses were, it suggested that three areas were particularly rich in source material. Firstly, the contemporary orchestral treatise, which established examples of ‘good’ and acceptable orchestration, alongside the dangers of diferring from these accepted models. Commentators such as Adorno also saw orchestration as a

secondary compositional act—more a ‘craft’ than an art—that was particularly suited to the Viennese penchant for refinement, exemplified in visual art by the detailed surface configurations of many of works by the contemporary Secession movement and the objects of the *Wiener Werkstätte*.

Secondly, this thesis put forward the idea that the piano transcription, which frequently functioned as a tool for learning a piece before hearing it performed by an orchestra, began to cause moments of disjunction between the sounds listeners expected from their experiences at the piano and those they heard in the concert hall. In this sense it began to take on the function of ‘legitimizing’ more conservatively orchestrated pieces at the expense of those whose timbral construction was more complex and varied. Schreker’s *Kammersymphonie* fell into this second category, and a close examination of the contemporary critical response to this work highlights the third area of contemporary response to timbre: the concert review. The *Kammersymphonie* is now one of Schreker’s most frequently performed works, and its orchestration frequently engendered comment.

Given the attention timbre continuously receives in Schreker scholarship, it was surprising to find that little critical attention had been paid to the contemporary responses to this particular work (even in Christopher Hailey’s *Schreker* monograph). As a result, one of the contributions of chapter 1 is that its closing section starts to fill this gap in the scholarship and, in doing so, highlights the wider partisan debate that timbre engendered but also serves to explain the particular timbral features that critics responded to. Critics’ responses were often particularly fierce when it was felt that timbral construction had been focused upon at the expense of motivic working. One of the key contributions that arose from the discussion of Schreker’s piece was that it is densely motivic in construction—just as much as Schoenberg’s first Chamber Symphony, to which it was compared—and yet critics either chose to ignore this element, or the timbral construction of the work prevented them from hearing such relationships.

Chapter 1’s overview of the three categories that provoked timbral discussion—orchestral treatises, piano transcriptions, concert reviews—suggests that fin-de-siècle critics were well disposed to analyze more conservatively orchestrated works, but when composers of Schreker’s generation moved toward a more timbre-centred conception of the musical Idea, critics faced a ‘crisis of response’, unable or unwilling to effectively critique timbre’s role in the musical work.

Piano transcriptions were seen as a default ‘text’, but they failed to offer a sufficiently detailed representation of the timbral resonances in Schreker’s work, a quality which critics found so problematic. The issue that arises from many of these responses to orchestration at the fin-de-siècle was the idea proposed at the chapter’s opening: the equation of orchestration with ornamentation, and the sense that many critics found it difficult to accept that something they viewed as artificial or surface-deep was doing the much of the affective work in a piece such as the *Kammersymphonie*.

Chapter 2 examined Adorno’s theoretical responses to timbre, and, though his writing betrays similar conservative prejudices to those outlined in the opening chapter, his work on the subject should be seen as incredibly important as it is some of the first to critically analyze timbre’s role in musical construction. The ideas that Adorno presents are often fundamental to many of the discussions found later in the thesis: that timbral construction *can* take on a more modernist role as a parameter that can cause moments of disjunction, and subvert or distort. His category of breakthrough is important for spatial aspects of musical construction — in the way timbre is heard to intrude from ‘outside’ the musical scene. Phantasmagoria and suspension are very different timbral categories for Adorno—the first he considers to be a negative and deceptive category, the second a positive critique of music’s forward momentum—yet, this thesis suggested that if we remove Adorno’s value judgements *both* categories can be seen as capable of critiquing musical construction. For example, in Schreker’s *Der ferne Klang*, the phantasmagoric distant sound creates a certain subject-position and motivates the dramatic plot. Chapter 2’s contribution is that it begins to advance a model of musical construction that considers timbre as a parameter that can signify changes in music’s spatial presentation. This chapter also suggests ways in which timbre was used to subvert fin-de-siècle inter- and intra-compositional norms and that these should be taken as one of the fundamental elements for a historically-grounded analysis. For such moments to be heard as deviations, the music must establish certain norms within itself (resulting in *intra*-compositional conflict), or at least subvert standard expectations raised by treatises and the wider compositional practices of the time (*inter*-compositional deviance) outlined in Chapter 1. Adorno’s writings emphasize timbre’s role in these moments of contrast and subversion.

Given the partially spatial nature of Adorno’s critical assessment of timbre, and the fin-de-siècle tendency toward comparing the visual and musical arts, the final part of the chapter explored

this relationship in greater detail. Initial discussions examined contemporary Viennese responses for what Adorno called *Konvergenz*, essentially where the parameters of music and visual art could be shown to function in the same way (as opposed to merely assumed correspondences). Examination of Schreker's 'Klimtian' musical constructions suggested that they played with perspective in a similar way to their visual counterparts through their blending of *Figur* and *Grund* and distorted perspective. Through the use of recent ecological approaches by Albert Bregman and Eric F. Clarke, sufficient evidence emerged to support a further investigation of timbre's function as a signifier of distance and perspective within the auditory scene. The chapter's key thrust was that it began to suggest ways in which timbre's role in the musical scene might be more critically assessed through its ability to subvert and diverge from accepted norms, and through its perceived visual correlations.

Chapter 3 continued this discussion, by focussing on the fin-de-siècle preoccupation with the equivalence of visual colour and timbre. Timbre was frequently referred to as musical 'colour', and fin-de-siècle critics were seen to use exactly the same negative tropes to describe visual works that focussed on colour as they did with music that had a prominent orchestral element — tropes of physicality, sexuality, addiction, jewellery, clothing, degeneracy, surface, gloss, sensuality, and the feminine. The term 'colour' was frequently used by both composers and critics alike as a synonym for timbre, and the chapter asked whether this particular correlation was one of *Konvergenz* or convenience. Examination of Kandinsky and Adorno's contrasting writings on synaesthetic art suggested that the association of specific colours with specific timbres was highly subjective (even though Kandinsky valued this mode of correspondence more highly than Adorno, he still felt it to be 'provisional and clumsy'), with both writers suggesting that colour, and its sub-parameter brightness, had the ability to modify perceptions of perspective in visual art and the auditory scene. Whilst colour could be seen as symbolically important, the examples demonstrated that the most readily perceivable, less subjective, correspondence was between visual and timbral brightness. Recent ecological and cognitive theory extended this relationship, by explaining how timbre and colour were able to modify visual and auditory perspective (building on Adorno and Kandinsky's ideas), which eventually led to one of this chapter's chief contributions: a parametric map of auditory space. This 'map' positioned timbre as a key parameter, but did so by arguing for an alternate conception of timbre: that it is a *resultant* or emergent parameter, i.e. one that can be modified by dynamics and

pitch (changing dynamics and tessitura often change timbre). This broader view of timbre is one of the map's important contributions and a departure from the more 'isolationist' definitions other studies often put forward. The main issue with the map is that, due to parameters involved, it can only deal in broad relative movements. However, the map does highlight the potential for timbral objects to be placed within different strata in the auditory scene and, as a result, the map provides a framework with which to assess relative changes in musical depth and perspective. The final case study examined, appropriately, Schreker's *Der ferne Klang*, using the principles behind the map to discuss how Schreker's varied timbral configurations of his 'distant sound' to provoke certain subject-positions, and, how in the final presentation of the distant sound—this time positioned as very close within the auditory scene—Schreker's use of timbre might be compared to the disorienting use of perspective in Klimt's 'telescopic' landscape paintings in which distant objects are presented as close, but still retain the single plane of perspective common to objects in the background of the visual scene.

Chapter 4's discussion of the Viennese musical night scene rests strongly on the evidence put forward in the previous chapter. The readily perceivable correlation between visual and auditory brightness (or lack thereof) is used to put forward a number of fin-de-siècle timbral tropes that correspond to visual darkness and moonlight. These tropes are not simply timbrally 'dark' or 'bright', but recurring timbral configurations in the fin-de-siècle musical output that are constructed and used in ways that often mirror ecological practice (in semiotic terms moving from Symbolic signs toward Indexical, or Iconic signs). The chapter's opening remarks make a case for a contemporary Viennese viewpoint of the night as the place for escape and where the exploration of the individual subject-in-crisis frequently occurred. In Schoenberg's *Erwartung*, op. 17, timbre arguably plays a more prominent role than harmony, yet no serious analytical undertaking has considered its timbral construction in any great detail. This case study examines the use of nocturnal timbral tropes in *Erwartung*, suggesting that it is through the increasingly disjunct presentation of visual and auditory elements that gives a more convincing reading of the work's central protagonist as a subject in deep crisis, increasingly becoming more inwardly withdrawn from the reality of her surroundings. The analysis makes use of film theory from Michel Chion and Claudia Gorbman, but also from the opera studies of Carolyn Abbate. In my modification of Abbate's theory, the 'noumenal' paradoxically could

be considered that which only the audience can ‘see’, and the ‘phenomenal’ that which protagonist and audience view together. In *Erwartung*, then, the assumptions of Abbate’s theory are reversed. In this expressionist setting, the assumption is that one is *hearing* the internalized reactions of the solitary protagonist — an assumption confirmed by the nature of the text, and the numerous instances where auditory and visual fail to align. Such is the case in *Erwartung*, then, where discrepancies between the four stable visual scenes and constantly changing auditory response are not those of the audience, but rather those of the Woman who is not always privy to the ‘phenomenal’ staging around her. Not only is this analysis a new response to a much-analyzed work, but it is an important contribution to timbral analysis. The modified use of Abbate’s framework allowed similar timbral tropes to be classified into different categories, allowing the analysis to move beyond simple structural observations (e.g. ‘Timbre B is repeated in bar 34’), and instead to assess the *function* of each trope as part of *Erwartung*’s narrative trajectory toward inward retreat.

This chapter explained that the Viennese musical night scene formed a particularly important locus for the representation of subjective crisis and inward retreat or escape. In both works, the sense of ‘hysteria’ or ‘dream’, respectively, was already partly suggested by the sung text. However, it was only through examination of their timbral construction that strong musical evidence was provided for such interpretations, and suggested that whilst the immediate subject matter appeared to be ‘hysteria’ or ‘dream’, arguably the real subject matter was night as the place where the crisis of the individual and the retreat from the external could be expressed.

The final chapter deals with issues at the heart of fin-de-siècle Viennese attitudes toward timbre: ornament and excess, the beautiful and the grotesque. It suggests that the main case study, Zemlinsky’s opera *Der Zwerg* (1922), is a response to the crisis of timbral composition outlined in Chapter 1, which, by the time Zemlinsky composed his opera, had become a pressing issue following the post-war tendency toward reduced orchestral forces. *Der Zwerg*’s contrasting use of timbre was used in such a disjunctive manner that it appears to follow Adorno’s model of immanent self-critique which, despite the opera’s adherence to broadly tonal schemes, allows it to be viewed as one of Zemlinsky’s first explorations in a more modernist aesthetic. Schreker also makes use of the timbrally grotesque which was considered universally vulgar (or, in some cases, comic in its vulgarity). At the work’s opening, the two main characters are clearly demarcated by their orchestral

presentation and analysis of Zemlinsky's orchestral usage throughout the opera shows a shifting subject-position toward both: timbral grotesqueries, initially positioned as belonging to the Dwarf, are shown to uncannily shift in association toward the Court. In addition, the music of the Dwarf is initially presented (via Adorno's concept of breakthrough) as intruding upon the musical scene as an 'outsider'. Gradually, this position is reversed through timbral re-configuration: at the opera's end the Dwarf is placed centre-stage, with the neoclassical Court in a timbrally distant position, now placed as the outsider in the auditory scene. The death of the male Dwarf in an opera dominated by the female Infanta, seemed to provide a convincing counter-example to Catherine Clément's thesis in *Opera, or the Undoing of Women* (1989), but this viewpoint was undermined by the feminised status of the Dwarf as the object of *The Gaze*, whose destabilized masculinity is mirrored timbrally in the unstable femininity of the Infanta, whose orchestral accompaniment in the final scenes of the opera symbolically gestures toward child-like naivety and enchantment, in effect neutralizing her sexuality altogether. In addition, the "feminine" status of "sensual" late-romantic orchestration in contemporary Austro-Germanic circles (as outlined in chapters 1 and 3) suggests that *Der Zwerg* may partially follow Clément's pattern in that it requires the 'death' of the feminine, sensual—and therefore 'dangerous'—post-romantic orchestral idiom.

Zemlinsky's opera ultimately questions the supremacy of the higher social classes, and functions as an immanent critique of accepted standards of orchestral beauty, and it is important, therefore, to consider *Der Zwerg* as an important contribution to the *Zeitoper* genre. Finishing as it does with the 'death' of the post-romantic idiom and a negative disposition toward the neoclassical, *Der Zwerg* appears to encapsulate the contemporary debate, and could therefore be viewed as a moment of compositional crisis for Zemlinsky. For a few more years he maintained a post-romantic orchestral style, but eventually, in works such as the *Sinfonietta*, op.23, he would find a style that synthesized aspects of the neoclassical and the post-romantic, offering his own personal response to the crisis of orchestral construction in the early twentieth century.

In conclusion: throughout this thesis we have seen that timbre, at the fin-de-siècle, proved an easy target for critique as, in comparison to harmony or thematic working, it lacked a sense of historical pedigree and a detailed framework from which it could be seen to develop. Fin-de-siècle

critics and composers were faced with the challenge of upholding their 'aesthetic inheritance' against the perceived attack on rigorous thematic-harmonic content from composers who favoured a timbre-centred conception of the musical Idea. However, as this thesis has demonstrated, intense timbral construction is rarely a signifier for laziness elsewhere. A particularly good example is that with which this thesis opened: Schreker's *Kammersymphonie*. The reviews in chapter 1 were clear in their focus on the orchestral aspects of Schreker's work, yet many searched for its formal, motivic, or harmonic qualities. Rudolf Stephan Hoffmann, after further study, confirmed that all these elements were there, and questioned, therefore, why Schreker's work should still be heard as 'incomprehensible'. This analytical stance has changed relatively little since the fin-de-siècle: recent musicology still seeks to underpin timbrally rich and exciting works with formal, motivic, or harmonic analysis, as a 'legitimizing' tool. If, as in Schreker's *Kammersymphonie*, a work shows considerable detail in its timbral construction, and its primary effect is felt from its orchestration or timbral moments, why should there be a need any longer to analytically justify such a work through its 'secondary parameters' of tonality or motivic working? This thesis shows that much of critical value can be said about these works without a reliance on the traditional legitimating parameters of music analysis.

This thesis's contribution not only lies in its historically-grounded analytical approach, and the fact that it has attempted to distance itself from a solely score-centred conception of timbre, but in the fact that it has shown that timbre is not a parameter to be dismissed or ignored, but a difficult parameter that is worthy of in-depth analysis through its ability to subvert musical norms, to manipulate musical perspective and depth within the auditory scene, and to correlate strongly with the visual scene through the convergence of visual and musical brightness. These elements have been particularly fruitful in analysing stage works from fin-de-siècle Vienna, given their dramatic narrative and the perceived strength of timbre in constructing certain subject-positions. It is hoped that this project might stimulate further research in the timbral analysis of non-stage works from this period, given Vienna's centrality in the articulation of an intensive timbral modernism, and, indeed, that these results might provide a point of comparison to studies of other locations at the fin-de-siècle. It is also conceivable that this research might be particularly helpful to those focussing their study on issues surrounding musical landscape, given the ideas of musical stratification, depth,

and perspective that the study of timbre has raised throughout this thesis. Whilst this thesis has contributed to a deeper understanding of the field, it should be stressed that timbral analysis remains an urgent area for future research as our cognitive models continue to develop, and as our historical understanding of the fin-de-siècle continues to widen.

- Abbate, C. (1991). *Unsung Voices: Opera and Musical Narrative in the Nineteenth Century*. Princeton: Princeton University Press.
- Abbate, C. (2001). *In Search of Opera*. Princeton: Princeton University Press.
- Adler, F. (1922). Aufführungen Neuer Musikwerke: Zemlinskys "Zwerg". *Musikblätter des Anbruch*, vol. 11/12, pp. 185-6.
- Adorno, T. W. (1965). Richard Strauss, Born June 11, 1864. *Perspectives of New Music*, vol. 4/1, 14-32.
- Adorno, T. W. (1966). Richard Strauss: Part II. *Perspectives of New Music*, vol. 4/2, 113-129.
- Adorno, T. W. (1992). *Mahler: A Musical Physiognomy*. (E. Jephcott, Trans.) Chicago: University of Chicago Press.
- Adorno, T. W. (1994). *Alban Berg: Master of the smallest link*. (J. Brand, & C. Hailey, Trans.) Cambridge: CUP.
- Adorno, T. W. (1995). On Some Relationships between Music and Painting. In *The Musical Quarterly*, Vol. 79, No. 1 (S. Gillespie, Trans., pp. 66-79).
- Adorno, T. W. (1998). *Quasi una Fantasia: Essays on Modern Music*. (R. Livingstone, Trans.) London: Verso.
- Adorno, T. W. (1999). *Sound Figures [Klangfiguren]*. (R. Livingstone, Trans.) Stanford: Stanford University Press.
- Adorno, T. W. (2003). *Die musikalischen Monographien*. Frankfurt am Main: Suhrkamp Verlag.
- Adorno, T. W. (2005a). Four Hands, Once Again. *Cultural Critique*, vol. 60, 1-4.
- Adorno, T. W. (2005b). *In Search of Wagner*. (R. Livingstone, Trans.) London: Verso.
- Adorno, T. W. (2006). *Philosophy of New Music*. (R. Hullot-Kentor, Trans.) Minneapolis: University of Minnesota Press.
- Adorno, T. W. (2009). *Night Music: Essays on Music 1928-1962*. (W. Hoban, Trans.) Calcutta: Seagull Books.
- Athanassoglou-Kallmyer, N. (2003). Ugliness. In R. S. Nelson, & R. Schiff (Eds.), *Critical Terms for Art History* (pp. 281-295). Chicago: University of Chicago Press.
- Baragwanath, N. (2005). Musicology and Critical Theory: The Case of Wagner, Adorno, and Horkheimer. *Music and Letters*, vol. 87/1, 52-71.
- Batchelor, D. (2000). *Chromophobia*. London: Reaktion Books.
- Batchelor, D. (Ed.). (2008). *Colour*. London: Whitechapel.
- Beard, D., & Gloag, K. (2006). *Musicology: The Key Concepts*. Abingdon: Routledge.
- Beaumont, A. (2000). *Zemlinsky*. Ithaca: Cornell University Press.
- Beaumont, A. (2010). Berg and the Orchestra. In C. Hailey (Ed.), *Alban Berg and his World* (pp. 133-162). Princeton: Princeton University Press.
- Bekker, P. (1920). Kammersinfonien. *Die Frankfurter Zeitung*, 17.Jan.1920.
- Bekker, P. (1963). *The Orchestra* (Orig. publ. under the title 'The Story of The Orchestra', 1936). New York: W.W. Norton & Company.
- Beller, S. (Ed.). (2001). *Rethinking Vienna 1900*. Oxford: Berghahn Books.
- Berlioz, H. (1991). *Treatise on Instrumentation, revised by Richard Strauss*. (T. Front, Trans.) New York: Dover Publications.
- Blackmore, J. T. (1972). *Ernst Mach; his work, life, and influence*. Berkeley: University of California Press.
- Boehmer, K. (Ed.). (1997). *Schonberg and Kandinsky: an historic encounter*. Amsterdam: Harwood Academic Publishers.

- Botstein, L. (1985). *Music and Its Public: Habits of Listening and the Crisis of Musical Modernism in Vienna, 1870-1914*. PhD Thesis. Harvard University.
- Botstein, L. (1992). Listening through Reading: Musical Literacy and the Concert Audience. *19th-Century Music*, vol. XVI/2, 129-145.
- Boulez, P. (1987). Timbre and composition — timbre and language. *Contemporary Music Review*, vol. 2/1, 161-171.
- Bregman, A. S. (1990). *Auditory Scene Analysis: The Perceptual Organization of Sound*. Cambridge: The MIT Press.
- Brinkmann, R. (1980). Franz Schreker — ein ferner Klang?: Bemerkungen zur Forschungslage und anhand der Kammersinfonie. In E. Budde, & R. Stephan (Eds.), *Franz Schreker-Symposium [1978]* (pp. 27-36). Berlin: Colloquium Verlag.
- Brown, A. P. (2003). Franz Schreker (1878-1934). In *The Symphonic Repertoire* (pp. 884-91). Bloomington: Indiana University Press.
- Brown, J. (2007). *Bartók and the Grotesque: Studies in Modernity, the Body and Contradiction in Music*. Aldershot: Ashgate.
- Campbell, M. (2009). *Timbre (i)*. Retrieved 2009 June from Grove Music Online, Oxford Music Online: <http://www.oxfordmusiconline.com/subscriber/article/grove/music/27973>
- Campbell, M., & Greated, C. (1987). *The Musician's Guide to Acoustics*. Oxford: OUP.
- Carpenter, A. (2010). Schoenberg's Vienna, Freud's Vienna: Re-Examining the Connections between the Monodrama 'Erwartung' and the Early History of Psychoanalysis. *The Musical Quarterly*, vol.93, 144-181.
- Carse, A. (1964). *The History of Orchestration*. New York: Dover.
- Celestini, F. (2006). *Die Unordnung der Dinge: Das musikalische Groteske in der Wiener Moderne (1885-1914)*. Stuttgart: Franz Steiner.
- Chion, M. (1994). *Audio-Vision: Sound on Screen*. (W. Murch, & C. Gorbman, Trans.) New York: Columbia University Press.
- Christensen, T. (1999). Four-Hand Piano Transcription and Geographies of Nineteenth-Century Musical Reception. *Journal of the American Musicological Society*, Vol.52 (2), 255-298.
- Clarke, E. F. (1999). Subject-Position and the Specification of Invariants in Music by Frank Zappa and P. J. Harvey. *Music Analysis*, vol. 18/3, 347-374.
- Clarke, E. F. (2005). *Ways of Listening: an ecological approach to the perception of musical meaning*. New York: OUP.
- Clément, C. (1989). *Opera, or the Undoing of Women*. London: Virago Press.
- Clement, R. T. (1994). *Les Fauves: a sourcebook*. Westport, Connecticut: Greenwood Press.
- Cohn, R. (2004). Uncanny Resemblances: Tonal Signification in the Freudian Age. *Journal of the American Musicological Society*, vol. 57/2, 285-323.
- Cook, N. (1987). *A Guide to Musical Analysis*. Oxford: OUP.
- Cook, N. (2007). *The Schenker Project: Culture, Race and Music in 'fin-de-siecle' Vienna*. Oxford: OUP.
- Cramer, A. (2002). Schoenberg's 'Klangfarbenmelodie': A Principle of Early Atonal Harmony. *Music Theory Spectrum*, vol. 24/1, 1-34.
- Crawford, J. C. (1980). 'Die glückliche Hand': Further Notes. *Journal of the Arnold Schoenberg Institute*, vol. IV/1, 68-76.
- Cumming, N. (2000). *The Sonic Self: Musical Subjectivity and Signification*. Bloomington: Indiana University Press.
- Dahlhaus, C. (1987a). Analytical instrumentation: Bach's six-part ricercar as orchestrated by Anton Webern. In *Schoenberg and the New Music* (D. Puffett, & A. Clayton, Trans., pp. 181-91). Cambridge: CUP.

- Dahlhaus, C. (1987b). Schoenberg's Orchestral Piece Op. 16, No. 3 and the Concept of Klangfarbenmelodie. In *Schoenberg and the New Music* (D. Puffett, & A. Clayton, Trans., pp. 141-3). Cambridge: CUP.
- Dahlhaus, C. (1989). *Nineteenth-Century Music*. (J. B. Robinson, Trans.) Berkeley: University of California Press.
- Daub, A. (2006). Adorno's Schreker: charting the self-dissolution of the distant sound. *Cambridge Opera Journal*, vol. 18/3, 247-71.
- Davies, S. (2008). Musical Works and Orchestral Colour. *British Journal of Aesthetics*, vol. 48/4, 363-375.
- Decker, C. (2007). Austria. In G. H. Cody, & E. Sprinchorn (Eds.), *The Columbia Encyclopedia of Modern Drama*, Vol.1 (pp. 81-7). New York: Columbia University Press.
- Dodd, J. (2010). Confessions of an Unrepentant Timbral Sonicist. *British Journal of Aesthetics*, vol. 50/1, 33-52.
- Dolp, L. (2010). Viennese 'Moderne' and Its Spatial Planes, Sounded. *Nineteenth-Century Music*, Vol. 33/3, 247-269.
- Downes, S. (2010). *Music and Decadence in European Modernism: The Case of Central and Eastern Europe*. New York: CUP.
- Dreyfus, L. (2010). *Wagner and the Erotic Impulse*. Cambridge: Harvard University Press.
- Erickson, R. (1975). *Sound Structure in Music*. Berkeley: University of California Press.
- Fink, R. (2001). Going Flat: Post-Hierarchical Music Theory and the Musical Surface. In N. Cook, & M. Everist (Eds.), *Rethinking Music* (pp. 102-137). Oxford: OUP.
- Franklin, P. (1991). Distant Sounds - Fallen Music: "Der ferne Klang" as 'Woman's Opera'? *Cambridge Opera Journal*, vol. 3/2, 159-172.
- Franklin, P. (2006). "Wer weiss, Vater, ob as nicht Engel sind?" Reflections on the Pre-Fascist Discourse of Degeneracy in Schreker's 'Die Gezeichneten'. In N. Bacht (Ed.), *Music, Theatre and Politics in Germany: 1848 to the Third Reich* (pp. 173-184). Aldershot: Ashgate.
- Freud, S. (1997). *The Interpretation of Dreams*. (A. A. Brill, Trans.) Ware: Wordsworth Editions Limited.
- Frisch, W. (1990). Music and Jugendstil. *Critical Inquiry*, vol. 17/1, 138-161.
- Frisch, W. (2005). Chapter 3 — Convergences: Music and the Visual Arts. In *German Modernism: Music and the Arts* (pp. 88-137). Berkeley: University of California Press.
- Goethe, J. W. (1841). *Theory of Colours*. (C. L. Eastlake, Trans.) London: John Murray.
- Gorbman, C. (1987). *Unheard Melodies: Narrative Film Music*. London: BFI Publishing.
- Grey, J. M. (1977). Multidimensional perceptual scaling of musical timbres. *Journal of the Acoustical Society of America*, vol. 61/5, 1270-1277.
- Grimley, D. M. (2005). Hidden Place: Hyper-realism in Björk's 'Vespertine' and 'Dancer in the Dark'. *twentieth-century music*, vol. 2/1, 37-51.
- Grimley, D. M. (2011). *Carl Nielsen and the Idea of Modernism*. Woodbridge: The Boydell Press.
- Gurney, E. (1880). *The Power of Sound*. London: Smith, Elder, & Co.
- Hahl-Koch, J. (Ed.). (1984). *Arnold Schoenberg—Wassily Kandinsky: Letters, Pictures and Documents*. (J. C. Crawford, Trans.) London: Faber.
- Hailey, C. (1993). *Franz Schreker, 1878-1934: a cultural biography*. Cambridge: CUP.
- Hailey, C. (1996). FRANZ SCHREKER: *Chamber Symphony (1916)*. Retrieved July 7, 2010 from [programme note for American Symphony Orchestra concert, 10. May 1996]: <http://www.americansymphony.org/dialogue.php?id=325&season=1995-1996>
- Hailey, C. (1997). *Preface to 'Nachtstück für Orchester (1906/1907)'*, UE Score 30387. Wien: Universal Edition.
- Hailey, C. (2002). *Preface to 'Der Geburtstag der Infantin'*, UE Score 31426. Wien: Universal Edition.

- Hailey, C. (2002). *Zemlinsky's Mirror*. Retrieved October 2011 from <http://americansymphony.org/zemlinskys-mirror/>
- Hanslick, E. (1988). *Hanslick's Music Criticisms*. (H. Pleasants, Trans.) Mineola, N.Y.: Dover.
- Harrison, C., Wood, P., & Gaiger, J. (Eds.). (2001). *Art in Theory: 1815-1900*. Oxford: Blackwell.
- Helmholtz, H. (1885). *On the Sensations of Tone as a Physiological Basis for the Theory of Music*. (A. J. Ellis, Trans.) London: Longmans, Green, and Co.
- Hoeckner, B. (1997). Schumann and Romantic Distance. *Journal of the American Musicological Society*, vol. 50/1, 55-132.
- Hoffmann, R. S. (1921). *Franz Schreker*. Wien: E.P. Tal & Co. Verlag.
- Hopkins, R. G. (1990). *Closure and Mahler's Music: The Role of Secondary Parameters*. Philadelphia: University of Pennsylvania Press.
- Janik, A., & Toulmin, S. (1996). *Wittgenstein's Vienna*. Chicago: Elephant Paperbacks.
- Jewanski, J. (2007). Farbe-Ton-Beziehung. In *Musik in Geschichte und Gegenwart (MGG)* (pp. 345-371). Kassel: Bärenreite-Metzler.
- Jewanski, J. (2010). *Colour and Music*. Retrieved October 2010 from Grove Music Online. Oxford Music Online: <http://www.oxfordmusiconline.com/subscriber/article/grove/music/0615>
- Johnson, J. (1995). Reviewed works: 'Mahler: A Musical Physiognomy' by Theodor Adorno, trans. Jephcott; and 'Quasi una Fantasia' by Theodor Adorno, trans. Livingstone. *Music Analysis*, vol. 14/1, 112-121.
- Johnson, J. (1999). *Webern and the Transformation of Nature*. Cambridge: CUP.
- Johnson, J. (2009). *Mahler's Voices: expression and irony in the songs and symphonies*. Oxford: OUP.
- Johnston, W. M. (1972). *The Austrian Mind: An Intellectual and Social History, 1848-1938*. Berkeley: University of California Press.
- Kandinsky, W. (1977). *Concerning the Spiritual in Art (1911)*. (M. T. Sadler, Trans.) New York: Dover.
- Kandinsky, W. (1982). *KANDINSKY: Complete Writings on Art, Vol.1 (1901-1921)*. (K. C. Lindsay, & P. Vergo, Eds.) Boston: G. K. Hall & Co.
- Kapeller, M. (2010). Zweierlei Kammer-symphonien — Über Schönberg und Schreker. *Österreichische Musikzeitschrift*, vol.1, 14-21.
- Kappel, E. (2010). *Friedrich von Hausegger's Aesthetics of Musical Expression*. Retrieved March 16, 2010 from Conference Paper, European Congress of Aesthetics, Madrid, 10-12 November 2010: <http://www.uam.es/otros/estetica/DOCUMENTS EN PDF/QUINTA TANDA/ELISABETH KAPPEL.pdf>
- Keathley, E. L. (2010). Interpreting 'Erwartung': collaborative process and early reception. In J. Shaw, & J. Auner (Eds.), *The Cambridge Companion to Schoenberg* (pp. 81-93). Cambridge: CUP.
- Kienzle, U. (1998). *Das Trauma hinter dem Traum: Franz Schrekers Oper "Der ferne Klang" und die Wiener Moderne*. Schliengen: Edition Argus.
- Kivy, P. (1993). Orchestrating Platonism. In *The fine art of repetition* (pp. 75-94). Cambridge: CUP.
- Kittel, K. (2010). *Seeing Mahler: music and the language of antisemitism in fin-de-siècle Vienna*. Farnham: Ashgate.
- Kohlmetz, C., Müller, S. V., Nager, W., Münte, T. F., & Altenmüller, E. (2003). Selective Loss of Timbre Perception for Keyboard and Percussion Instruments Following a Right Temporal Lesion. *Neurocase*, vol. 9/1, 86-93.
- Kurdiovsky, R. (2006). Adolf Loos. In C. Brandstätter, *Vienna 1900 and the Heroes of Modernism* (pp. 293-307). London: Thames and Hudson.

- Kurth, E. (1926). *Bruckner* (Vol. 1). Berlin: Max Hesses Verlag.
- Kurth, E. (1991). *Ernst Kurth: Selected Writings*. (L. A. Rothfarb, Ed., & L. A. Rothfarb, Trans.) Cambridge: CUP.
- Le Rider, J. (1993). *Modernity and Crises of Identity: Culture and Society in Fin-de-Siècle Vienna*. (R. Morris, Trans.) Cambridge: Polity Press.
- Lee, S. D. (2005). A Minstrel in a World without Minstrels: Adorno and the Case of Schreker. *Journal of the American Musicological Society*, vol. 58/3, 639–696.
- Lee, S. D. (2006). 'A Florentine Tragedy', or woman as mirror. *Cambridge Opera Journal*, vol. 18/1, 33–58.
- Lee, S. D. (2010). The Other in the Mirror, or, Recognizing the Self: Wilde's and Zemlinsky's Dwarf. *Music & Letters*, vol. 91/2, 198–223.
- Lerdahl, F. (1987). Timbral hierarchies. *Contemporary Music Review*, vol. 2, 135–60.
- Livingstone, M. (2008). *Vision and Art: the biology of seeing*. New York: ABRAMS.
- Long, C. (2009). The Origins and Context of Adolf Loos's "Ornament and Crime". *Journal of the Society of Architectural Historians*, vol. 68/2, 200–223.
- Loos, A. (2002). Ornament and Crime (1908). In M. Ward, & B. Miller (Eds.), *Crime and Ornament, The Arts and Popular Culture in the Shadow of Adolf Loos* (pp. 29–36). Toronto: YYZ Books.
- Lowengard, S. (2006). Number, Order, Form: Color Systems and Systemization. In *The Creation of Color in Eighteenth-Century Europe*. New York: Columbia University Press e-book: http://www.gutenberg-e.org/lowengard/A_Chap03.html.
- MacDonald, H. (2002). *Berlioz's Orchestration Treatise: A Translation and Commentary*. Cambridge: CUP.
- Mahler-Werfel, A. (1998). *Alma Mahler-Werfel : diaries 1898-1902 / selected and translated by Antony Beaumont ; from the German edition transcribed and edited by Anthony Beaumont and Susanne Rode-Breymann*. London: Faber and Faber.
- Marković-Stokes, K. (2004). To Interpret or to Follow? Mahler's Beethoven 'Retuschen' and the Romantic Critical Tradition. *Beethoven Forum*, vol. 11/1, 1–40.
- Martner, K. (Ed.). (1979). *Selected Letters of Mahler*. London: Faber & Faber.
- Mathews, P. (2006). *Orchestration: an anthology of writings*. Abingdon: Routledge.
- McAdams, S., & Giordano, B. L. (2009). The perception of musical timbre. In S. Hallam, I. Cross, & M. H. Thaut (Eds.), *The Oxford Handbook of Music Psychology* (pp. 72–80). Oxford: OUP.
- Mead, A. (1999). Bodily Hearing: Physiological Metaphors and Musical Understanding. *Journal of Music Theory*, vol. 43/1, 1–19.
- Mitchell, D. (1995). Cradles of the New: Paris and Vienna at the Turn of the Century. In M. Cooke (Ed.), *Cradles of the New: Writings on Music 1951-1991* (pp. 134–161). London: faber and faber.
- Moore, H. C. (1991). *The Structural Role of Orchestration in Brahms's Music: a study of the "Third Symphony"*, PhD Thesis. New Haven: Yale University.
- Musil, R. (1995). *The Man Without Qualities*. (S. Wilkins, & B. Pike, Trans.) London: Picador.
- Musil, R. (1998). *Diaries: 1899-1941*. (M. Mirsky, A. Frisé, Eds., & P. Payne, Trans.) New York: Basic Books.
- Natter, T., & Hollein, M. (Eds.). (2005). *The Naked Truth: Klimt, Schiele, Kokoschka and Other Scandals*. Munich: Prestel.
- Nattiez, J.-J. (1990). *Music and Discourse: Toward a Semiology of Music*. (C. Abbate, Trans.) Princeton: Princeton University Press.
- Neuwirth, G. (1972). *Die Harmonik in der Oper "Der ferne Klang" von Franz Schreker*. Regensburg: Bosse.

- Neuwirth, G. (1981). *Preface to 'Franz Schreker: Kammer-symphonie (1916)'*. Wien: Universal Edition A. G.
- Nietzsche, F. (1997). *Thus Spake Zarathustra*. (T. Common, Trans.) London: Wordsworth Editions.
- Notley, M. (1997). Volksconcerte in Vienna and Late Nineteenth-Century Ideology of the Symphony. *Journal of the American Musicological Society*, vol. 50/2-3, 421-453.
- Paddison, M. (1993). *Adorno's Aesthetics of Music*. Cambridge: CUP.
- Painter, K. (1995). The Sensuality of Timbre: Responses to Mahler and Modernity at the Fin de siècle. *19th-Century Music*, vol. 18/3, 236-256.
- Painter, K. (1996). *The Aesthetics of the Listener: New Conceptions of Musical Meaning, Timbre, and Form in the Early Reception of Mahler's Symphonies 5-7*, PhD Thesis. New York: University of Columbia Press.
- Painter, K. (2007). Sensuality and Redemption. In *Symphonic Aspirations: German Music and Politics 1900-1945* (pp. 81-124). Cambridge: Harvard University Press.
- Painter, K. (2007). *Symphonic Aspirations: German Music and Politics, 1900-1945*. Cambridge: Harvard University Press.
- Parks, R. S. (1999). A Viennese Arrangement of Debussy's 'Prélude à l'après-midi d'un faune': Orchestration and Musical Structure. *Music & Letters*, vol. 80/1, 50-73.
- Peattie, T. (2002). In Search of Lost Time: Memory and Mahler's Broken Pastoral. In K. Painter (Ed.), *Mahler and His World* (pp. 185-198). Princeton: Princeton University Press.
- Pierce, J. R. (1992). *The Science of Musical Sound*. New York: W. H. Freeman and Co.
- Rehding, A. (2003). *Hugo Riemann and the Birth of Modern Musical Thought*. Cambridge: CUP.
- Rehding, A. (2009). *Music and Monumentality: commemoration and wonderment in nineteenth-century Germany*. Oxford: OUP.
- Riemann, H. (1895). *Catechism of Musical Aesthetics*. (H. Bewerunge, Trans.) London: Augener & Co.
- Rimsky-Korsakov, N. (1964). *Principles of Orchestration: with musical examples drawn from his own works*. (M. Steinberg, Ed., & E. Agate, Trans.) New York: Dover Publications.
- Robertson, R. (2002). Book Review: Rethinking Vienna 1900, by Steven Beller. *Journal of European Studies*, 32, 77-8.
- Roman, Z. (1999). (Musical) 'Jugendstil' Revisited: Interspecific Conceptual Modelling and the Turn-of-the-Century 'Peripheral' Arts. *International Review of the Aesthetics and Sociology of Music*, vol. 30/2, 111-149.
- Rothfarb, L. A. (1988). *Ernst Kurth as Theorist and Analyst*. Philadelphia: University of Pennsylvania Press.
- Rusconi, E., Kwan, B., Giordano, B. L., Umiltà, C., & Butterworth, B. (2006). Spatial representation of pitch height: the SMARC effect. *Cognition*, vol. 99/2, 113-129.
- Rushton, J. (2003). Ch. 5 'The art of orchestration'. In C. Lawson (Ed.), *The Cambridge Companion to the Orchestra* (pp. 92-111). Cambridge: CUP.
- Salerno, M. (2006). Modernity and Enchantment: A Historiographic Review. *The American Historical Review*, vol. 111/3, 692-716.
- Sandell, G. (2010). Retrieved March 14, 2010 from SHARC, Sandell Harmonic Archive: <http://www.timbre.ws/>
- Schirn Kunsthalle Frankfurt. (2002). *The Visions of Arnold Schönberg: the painting years*. (M. Hollein, Ed.) Osfildern: Hatje Cantz.
- Schoenberg, A. (1975). *Style and Idea: Selected Writings of Arnold Schoenberg*. (L. Black, Trans.) London: faber and faber.

- Schoenberg, A. (1978). *Theory of Harmony ('Harmonielehre' - 1911)*. (R. E. Carter, Trans.) Berkeley: University of California Press.
- Schoenberg, A. (1984). Breslau Lecture on 'Die glückliche Hand'. In J. Hahl-Koch (Ed.), *Arnold Schoenberg—Wassily Kandinsky: Letters, Pictures and Documents* (J. C. Crawford, Trans., pp. 102-7). London: Faber and Faber.
- Schorske, C. E. (1981). *Fin-de-siècle Vienna: Politics and Culture*. Cambridge: CUP.
- Schorske, C. E. (1982). Mahler and Klimt: Social Experience and Artistic Evolution. *Daedalus*, Vol.111/3, 29-50.
- Schreker, F., & Strasfogel, I. (Composers). (2001). Schreker-Strasfogel: Piano Transcriptions (Liner Notes). [K. Lessing, Performer] Capriccio Records (C10873).
- Schubert, E., & Wolfe, J. (2006). Does Timbral Brightness Scale with Frequency? *Acta Acustica united with Acustica*, vol. 92, 820-825.
- Sengoopta, C. (2000). *Otto Weininger: Sex, Science, and Self in Imperial Vienna*. Chicago: University of Chicago Press.
- Shaw-Miller, S. (2002). *Visible Deeds of Music: Art and Music from Wagner to Cage*. New Haven: Yale University Press.
- Shaw-Miller, S. (2007). Kandinsky and Schoenberg: Musicality and Abstraction. In F. Guy, S. Shaw-Miller, & M. Tucker, *Eye-Music: Kandinsky, Klee and all that jazz* (pp. 20-29). Chichester: Pallant House Gallery.
- Shaw-Miller, S. (2009). Art in Vienna 1900-1935. In *City of Dreams: Vienna 1900-1935* (pp. 24-7). London: Philharmonia Orchestra Season Programme.
- Sheinbaum, J. J. (2002). *Timbre, Form, and Fin-de-Siècle Refractions in Mahler's Symphonies*, PhD Thesis. New York: Cornell University.
- Sheinbaum, J. J. (2006). Adorno's Mahler and the Timbral Outsider. *Journal of the Royal Musical Association*, vol. 131/1, 38-82.
- Sheinberg, E. (2000). *Irony, Satire, Parody and the Grotesque in the Music of Shostakovich: A Theory of Musical Incongruities*. Aldershot: Ashgate.
- Spitzer, J. (1996). Metaphors of the Orchestra—The Orchestra as a Metaphor. *The Musical Quarterly*, vol. 80/2, 234-264.
- Steetle, K. E. (2007). *Orchestrational Markedness and its Effect on Form*, MMus Thesis. Tallahassee: Florida State University.
- Stewart, L., von Kriegstein, K., Dalla Bella, S., Warren, J. D., & Griffiths, T. D. (2009). Disorders of musical cognition. In S. Hallam, I. Cross, & M. H. Thaut (Eds.), *The Oxford Handbook of Music Psychology* (pp. 184-196). Oxford: OUP.
- Stewart, L., von Kriegstein, K., Warren, J. D., & Griffiths, T. D. (2006). Music and the brain: disorders of musical listening. *Brain*, vol. 129, 2533-2553.
- Storr, A. (2001). *Freud: a very short introduction*. New York: OUP.
- Subotnik, R. R. (1996). *Deconstructive Variations: Music and Reason in Western Society*. Minneapolis: University of Minnesota Press.
- Taruskin, R. (2005). Chapter 47: "Reaching (for) Limits". In *The Oxford History of Western Music, Vol.IV* (pp. 1-58). Oxford: OUP.
- Taruskin, R. (2011). Review: Music and Decadence in European Modernism: The Case of Central and Eastern Europe, by Stephen Downes. *Notes*, June Issue, 750-55.

- Timms, E. (2009). Vienna Circles: The Parameters of Cultural Innovation. In *City of Dreams: Vienna 1900-1935* (pp. 14-18). London: Philharmonia Orchestra Season Programme.
- Tsang, L. (2000). *Musical Timbre in Context: The Second Viennese School, 1909-1925*, PhD Thesis. University of Southampton.
- Universal Edition. (1920). Kammer-Symphonie [Reviews]. *Musikblätter des Anbruch, Schreker Sonder-nummer*, vol. 2/1-2, pp. 60-2.
- University of Adelaide. (1984). *Art Nouveau and Jugendstil and the Music of the Early 20th Century*, *Miscellanea Musicologica, Adelaide Studies in Musicology*, vol. 13. (A. D. McCredie, Ed.) Adelaide: University of Adelaide.
- van den Hoogen, E. (1981). "Die Orchesterwerke Franz Schreker in ihrer Zeit": *Werkanalytische Studien*. Regensburg: Gustav Bosse Verlag.
- Vergo, P. (1980). Music and abstract painting: Kandinsky, Goethe and Schoenberg. In *TOWARDS A NEW ART: essays on the background to abstract art 1910-20* (pp. 41-63). London: The Tate Gallery.
- Vergo, P. (1993). *Art in Vienna 1898-1918: Klimt, Kokoschka, Schiele, and their Contemporaries*. London: Phaidon.
- Wagner, A. (2006). Klimt's Landscapes and the Telescope. In S. Koja (Ed.), *Gustav Klimt: Landscapes* (pp. 161-172). London: Prestel.
- Watkins, H. (2008). Schoenberg's Interior Designs. *Journal of the American Musicological Society*, vol. 61/1, 123-206.
- Watkins, H. (2011). *Metaphors of Depth in German Musical Thought: From E. T. A. Hoffmann to Arnold Schoenberg*. Cambridge: CUP.
- Weber, H. (1984). Figur und Grund—Secessionistic Instrumentation of Alexander Zemlinsky. In A. D. McCredie (Ed.), *Art Nouveau and Jugendstil and the Music of the Early 20th Century*, *MISCELLANEA MUSICOLOGICA, Adelaide Studies in Musicology*, vol.13 (pp. 181-190). Adelaide: University of Adelaide.
- Wellesz, E. (1928). *Die neue Instrumentation (Band I)*. Berlin: Max Hesses.
- Wellesz, E. (1928b). *Die neue Instrumentation (Band II)*. Berlin: Max Hesses.
- Wickes, L. (1984). A Jugendstil Consideration of the opening and closing sections of the Vorspiel to Franz Schreker's opera "Die Gezeichneten". In A. D. McCredie (Ed.), *Art Nouveau and Jugendstil and the Music of the Early 20th Century*, *MISCELLANEA MUSICOLOGICA, Adelaide Studies in Musicology*, vol.13 (pp. 203-222). Adelaide: University of Adelaide.
- Wickes, L. (1989). Schoenberg, 'Erwartung', and the Reception of Psychoanalysis in Musical Circles in Vienna until 1910/1911. *Studies in Music*, vol. 23, 88-106.
- Wiener Secession. (1971). *Vienna Secession : art nouveau to 1970 : Royal Academy of Arts, London, 9 January-7 March 1971*. Vienna: Jugend & Volk, 1971.

First recurrence of 'Idea A' in the scherzo of Schreker's *Kammersymphonie*, bb. 296-301

Second recurrence of 'Idea A' in the scherzo of Schreker's *Kammersymphonie*, bb. 303-7

UE 6032

2nd Return of 'Idea A' in the Scherzo, bb. 303-7

This page contains a full orchestral score for the 2nd return of 'Idea A' in the Scherzo, measures 303-7. The score is arranged in two systems, with the first system on the left and the second system on the right. The instruments are listed on the left side of each system:

- Fl. (Flute)
- Ob. (Oboe)
- Clar. in A. (Clarinet in A)
- Fag. (Bassoon)
- Hr. in F. (Horn in F)
- Trpt. in C. (Trumpet in C)
- Pk. (Timpani)
- Hrn. (Horn)
- Col. (Cello)
- Sarm. (Saxophone)
- Klar. (Clarinet)
- VI. (Violin I)
- VI. (Violin II)
- VI. (Violin III)
- VI. (Violin IV)
- Br. (Bassoon)
- Br. (Bassoon)
- Vcl. (Violoncello)
- Vcl. (Violoncello)
- Vcl. (Violoncello)
- H. (Double Bass)

The score features various musical notations, including dynamics such as *pp*, *mf*, and *sf*, and performance instructions like *rit.* and *rit. ass.*. The music is written in a 3/4 time signature and includes complex rhythmic patterns and melodic lines for the woodwinds and strings.

Final allusion to 'Idea A' in the coda of Schreker's *Kammersymphonie*, bb. 570-1

UE 6032

Schreker's *Der ferne Klang*: Act I, Sc.1, bb.[12]¹ to [12]

UE 3097 I

Der ferne Klang, closing scenes: “Hörst du den Ton?”, Act III, [99]—end.

UE 3097 III

398 In sanft bewegender Bewegung.

Musical score for measures 398-399. The score includes parts for Flöte I, Flöte II, Oboe I, Oboe II, Klarinette I, Klarinette II, Fagott I, Fagott II, Horn I, Horn II, Horn III, Horn IV, Trompete I, Trompete II, Trompete III, Trompete IV, Trommeln, Becken, and Cymbale. The music is in a 3/4 time signature and features a melodic line in the woodwinds and strings. A rehearsal mark [398] is present at the beginning of the section.

399

Musical score for measures 399-400. The score includes parts for Flöte I, Flöte II, Oboe I, Oboe II, Klarinette I, Klarinette II, Fagott I, Fagott II, Horn I, Horn II, Horn III, Horn IV, Trompete I, Trompete II, Trompete III, Trompete IV, Trommeln, Becken, and Cymbale. The music continues from the previous section. A rehearsal mark [399] is present at the beginning of the section.

108

S.
 A.
 T. 1.
 T. 2.
 B. 1.
 B. 2.
 Kl.
 Harf. I.
 Harf. II.
 Oboe.
 F.

(piano) (schmerzhaft)
 Hand' die den Tod!
 der erschreckt mit

108
 ERSTE Z.

109

S.
 A.
 T. 1.
 T. 2.
 B. 1.
 B. 2.
 Kl.
 Harf. I.
 Harf. II.
 Oboe.
 F.

Hand' die den Tod!
 der erschreckt mit
 dem Tod' die er
 Hand' die den Tod!
 der erschreckt mit

109
 ERSTE Z.

I. 1. *Andante*
 II. 2. *Andante*
 III. 3. *Andante*
 IV. 4. *Andante*
 V. 5. *Andante*
 VI. 6. *Andante*
 VII. 7. *Andante*
 VIII. 8. *Andante*
 IX. 9. *Andante*
 X. 10. *Andante*
 XI. 11. *Andante*
 XII. 12. *Andante*
 XIII. 13. *Andante*
 XIV. 14. *Andante*
 XV. 15. *Andante*
 XVI. 16. *Andante*
 XVII. 17. *Andante*
 XVIII. 18. *Andante*
 XIX. 19. *Andante*
 XX. 20. *Andante*
 XXI. 21. *Andante*
 XXII. 22. *Andante*
 XXIII. 23. *Andante*
 XXIV. 24. *Andante*
 XXV. 25. *Andante*
 XXVI. 26. *Andante*
 XXVII. 27. *Andante*
 XXVIII. 28. *Andante*
 XXIX. 29. *Andante*
 XXX. 30. *Andante*
 XXXI. 31. *Andante*
 XXXII. 32. *Andante*
 XXXIII. 33. *Andante*
 XXXIV. 34. *Andante*
 XXXV. 35. *Andante*
 XXXVI. 36. *Andante*
 XXXVII. 37. *Andante*
 XXXVIII. 38. *Andante*
 XXXIX. 39. *Andante*
 XL. 40. *Andante*
 XLI. 41. *Andante*
 XLII. 42. *Andante*
 XLIII. 43. *Andante*
 XLIV. 44. *Andante*
 XLV. 45. *Andante*
 XLVI. 46. *Andante*
 XLVII. 47. *Andante*
 XLVIII. 48. *Andante*
 XLIX. 49. *Andante*
 L. 50. *Andante*
 LI. 51. *Andante*
 LII. 52. *Andante*
 LIII. 53. *Andante*
 LIV. 54. *Andante*
 LV. 55. *Andante*
 LVI. 56. *Andante*
 LVII. 57. *Andante*
 LVIII. 58. *Andante*
 LIX. 59. *Andante*
 LX. 60. *Andante*
 LXI. 61. *Andante*
 LXII. 62. *Andante*
 LXIII. 63. *Andante*
 LXIV. 64. *Andante*
 LXV. 65. *Andante*
 LXVI. 66. *Andante*
 LXVII. 67. *Andante*
 LXVIII. 68. *Andante*
 LXIX. 69. *Andante*
 LXX. 70. *Andante*
 LXXI. 71. *Andante*
 LXXII. 72. *Andante*
 LXXIII. 73. *Andante*
 LXXIV. 74. *Andante*
 LXXV. 75. *Andante*
 LXXVI. 76. *Andante*
 LXXVII. 77. *Andante*
 LXXVIII. 78. *Andante*
 LXXIX. 79. *Andante*
 LXXX. 80. *Andante*
 LXXXI. 81. *Andante*
 LXXXII. 82. *Andante*
 LXXXIII. 83. *Andante*
 LXXXIV. 84. *Andante*
 LXXXV. 85. *Andante*
 LXXXVI. 86. *Andante*
 LXXXVII. 87. *Andante*
 LXXXVIII. 88. *Andante*
 LXXXIX. 89. *Andante*
 LXXXX. 90. *Andante*
 LXXXXI. 91. *Andante*
 LXXXXII. 92. *Andante*
 LXXXXIII. 93. *Andante*
 LXXXXIV. 94. *Andante*
 LXXXXV. 95. *Andante*
 LXXXXVI. 96. *Andante*
 LXXXXVII. 97. *Andante*
 LXXXXVIII. 98. *Andante*
 LXXXXIX. 99. *Andante*
 LXXXXX. 100. *Andante*

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I. 1. *Andante*
 II. 2. *Andante*
 III. 3. *Andante*
 IV. 4. *Andante*
 V. 5. *Andante*
 VI. 6. *Andante*
 VII. 7. *Andante*
 VIII. 8. *Andante*
 IX. 9. *Andante*
 X. 10. *Andante*
 XI. 11. *Andante*
 XII. 12. *Andante*
 XIII. 13. *Andante*
 XIV. 14. *Andante*
 XV. 15. *Andante*
 XVI. 16. *Andante*
 XVII. 17. *Andante*
 XVIII. 18. *Andante*
 XIX. 19. *Andante*
 XX. 20. *Andante*
 XXI. 21. *Andante*
 XXII. 22. *Andante*
 XXIII. 23. *Andante*
 XXIV. 24. *Andante*
 XXV. 25. *Andante*
 XXVI. 26. *Andante*
 XXVII. 27. *Andante*
 XXVIII. 28. *Andante*
 XXIX. 29. *Andante*
 XXX. 30. *Andante*
 XXXI. 31. *Andante*
 XXXII. 32. *Andante*
 XXXIII. 33. *Andante*
 XXXIV. 34. *Andante*
 XXXV. 35. *Andante*
 XXXVI. 36. *Andante*
 XXXVII. 37. *Andante*
 XXXVIII. 38. *Andante*
 XXXIX. 39. *Andante*
 XL. 40. *Andante*
 XLI. 41. *Andante*
 XLII. 42. *Andante*
 XLIII. 43. *Andante*
 XLIV. 44. *Andante*
 XLV. 45. *Andante*
 XLVI. 46. *Andante*
 XLVII. 47. *Andante*
 XLVIII. 48. *Andante*
 XLIX. 49. *Andante*
 L. 50. *Andante*
 LI. 51. *Andante*
 LII. 52. *Andante*
 LIII. 53. *Andante*
 LIV. 54. *Andante*
 LV. 55. *Andante*
 LVI. 56. *Andante*
 LVII. 57. *Andante*
 LVIII. 58. *Andante*
 LIX. 59. *Andante*
 LX. 60. *Andante*
 LXI. 61. *Andante*
 LXII. 62. *Andante*
 LXIII. 63. *Andante*
 LXIV. 64. *Andante*
 LXV. 65. *Andante*
 LXVI. 66. *Andante*
 LXVII. 67. *Andante*
 LXVIII. 68. *Andante*
 LXIX. 69. *Andante*
 LXX. 70. *Andante*
 LXXI. 71. *Andante*
 LXXII. 72. *Andante*
 LXXIII. 73. *Andante*
 LXXIV. 74. *Andante*
 LXXV. 75. *Andante*
 LXXVI. 76. *Andante*
 LXXVII. 77. *Andante*
 LXXVIII. 78. *Andante*
 LXXIX. 79. *Andante*
 LXXX. 80. *Andante*
 LXXXI. 81. *Andante*
 LXXXII. 82. *Andante*
 LXXXIII. 83. *Andante*
 LXXXIV. 84. *Andante*
 LXXXV. 85. *Andante*
 LXXXVI. 86. *Andante*
 LXXXVII. 87. *Andante*
 LXXXVIII. 88. *Andante*
 LXXXIX. 89. *Andante*
 LXXXX. 90. *Andante*
 LXXXXI. 91. *Andante*
 LXXXXII. 92. *Andante*
 LXXXXIII. 93. *Andante*
 LXXXXIV. 94. *Andante*
 LXXXXV. 95. *Andante*
 LXXXXVI. 96. *Andante*
 LXXXXVII. 97. *Andante*
 LXXXXVIII. 98. *Andante*
 LXXXXIX. 99. *Andante*
 LXXXXX. 100. *Andante*

183

Musical score for page 160, featuring vocal parts (Soprano, Alto, Tenor, Bass) and piano accompaniment. The score includes dynamic markings like "dim" and "poco".

SEGNI II.

Musical score for page 161, continuing the vocal and piano parts from page 160. It includes dynamic markings like "mf" and "poco".

SEGNI II.

Zemlinsky, *Lyric Symphony*, song IV: comparison of opening duet, with concealed reprise

UE 7371

IV. Langsam

63

1. Kl. in B *morendo*

Ekkl. in B *morendo*

1. Fag. *morendo*

3. Horn in F *morendo*

Langsam
1. Vl. Solo ohne Dämpfer
p schwäbend, sehr ruhig

2. Vl. *morendo*

Br. *morendo*

Vlc. *pp* *morendo*

Kb. *pp* *morendo*

sehr zart

1. Vlc. Solo ohne Dämpfer
p sehr zart

Zemlinsky's *Der Zwerg*, [121]⁶⁺

Moment of Dwarf's Timbral Breakthrough, at [121]¹¹,
compared to grotesque gestures of Court in previous bars

UE 17571

Der Zwerg, [183]³⁺

The triple-time dances played by off-stage orchestra

UE 17571

Der Zwerg, [285]⁺²–end.

The opera's closing bars, with 'anempathetic' intrusion from the Court's off-stage orchestra.

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287

KL (C)
 Fg.
 Hr. (F)
 1.2.
 Tamb.
 1. Vl.
 2. Vl.
 Br.
 Vc.
 Kb.

287

1.2.3.
 Fl.
 1.2. Ok.
 E.H.
 1.2.
 Kl. (G)
 Bl. (B)
 1.2.
 Fg.
 Klg.
 1.2.
 Hr. (F)
 3.4.
 1.2.3.
 Tpt. (C)
 1.2.3.
 Trp.
 Bbb.
 Pk.
 gr. Tr.
 T.-T.
 287

1.2.3.
 Vl. I
 Vl. II
 Br.
 Vc.
 Kb.

287

alle, ohne Dämpfer
 ohne Dämpfer
 ohne Dämpfer
 ohne Dämpfer
 arco
 alle, ohne Dämpfer arco

Vorhang

Der Zwerg, [271]³⁺

Timbral construction of 'distant' intrusions, in reference to the Court's off-stage dance music

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1. Fl.

2,3.

1. Ob.

E.H.

1. Kl. (B)

Bkl. (B)

1. Fg.

2,3.

1,2. Hr. (F)

3,4.

1,2,3. Tpt. (C)

1,2. Pos.

3. Btb.

Trgl.

In.

espr.
dolce

p

p

pp

cresc.

p

alle ohne Dämpfer

pp

pp

pp

Du mußt mit mir fröhlich sein. Sing ein heiteres Lied!

VI. I

VI. II

Br.

Vc.

Kh.

nicht hervortretend

p scherzando

ohne cresc.

nicht hervortretend

p scherzando

ohne cresc.

ohne Dämpfer

p

p

pizz.

arco

p

Der Zwerg, [42]²⁺

The Infanta's admiration of her table of luxury birthday gifts, beginning at [42]

UE 17571

42 beruhigend

KL. Fl. *dim.*
 1.2. Fl. *p dim.*
 1.2. Ob. 3. *dim.*
 1.2. Kl. (B) *dim.*
 Bkl. (B) *p dim.*
 1.2. Fg. 3. *p dim.*
 1.2. Hr. (F) *p dim.*
 3.4. *p dim.*
 1. Trp. (C) *mf*
 2.3. *mf*
 1.2.3. Posa. *mf*
 Bbn. *mf*
 Pk. *mf*
 Tgl. *mf*
 Kl. Tr. *mf*
 Bck. *mf*
 Cksp. *mf*
 Hr. *mf*
 Ccl. *mf*
 Vl. I *mf*
 Vl. II *mf*
 Br. *mf*
 Vc. *mf*
 Kb. *mf*

Viel ruhiger (♩ = 92), nicht schleppend, immer fließend

KL. Fl. *p*
 1.2. Fl. *p*
 1.2. Ob. 3. *p*
 1.2. Kl. (B) *pp*
 Bkl. (B) *pp*
 1.2. Fg. 3. *pp*
 1.2. Hr. (F) *pp*
 3.4. *pp*
 Pk. *pp*
 Hr. *pp*
 Ccl. *pp*
 Hr. *pp*
 Die Infanten am Gabentisch
 mit kindlichen Entzücken
 Wie schön sind die se
 Vl. I *p esp.*
 Vl. II *p*
 Br. *p*
 Vc. *p*
 Kb. *p*

Viel ruhiger (♩ = 92), nicht schleppend, immer fließend
 Sub-VI (ohne Dampf)
 m. Dfpl. *p*
 übrigen in Dfpl. *p*
 gestellt. *p*
 am Steg (bis 8) *p*
 am Steg (bis 8) *p*
 am Steg (bis 8) *p*
 am Steg (bis 8) *p*