Palimpsest, porosity and subception: The heard and the unheard in Paul Winkler's *Bondi* and *Sydney Harbour Bridge*

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Abstract

Two 1970's films by the German-Australian experimental film-maker Paul Winkler visually capture significant Sydney icons; Sydney Harbour Bridge and Bondi Beach, the visuals in each film supported asynchronously with minimal soundtracks. Michel Chion's (2009) notions of palimpsest (the idea of sound film as silent film overwritten with sound), and porosity (the connections between different structural layers of a film) are examined and used as the basis of an analysis of the sound in these two films. Dominique Nasta's focus on psychologically imagined sound (subception) is then explored, with various possible imagined sounds subjectively derived from the Winkler visuals presented. Existing and imagined sounds are discussed in relation to what Alex Gerbaz refers to as Winkler's 'fragmented aesthetic'.

Keywords

Australian experimental film

experimental film sound

film palimpsest and porosity

subception

Paul Winkler

Sydney Harbour Bridge and Bondi Beach

The heard and the unheard

From a sound perspective, the two experimental films by Paul Winkler discussed here are seemingly very simple and minimalistic: Nothing but the sounds of beachside waves for over fourteen minutes in the film *Bondi* (Winkler 1979), clearly though asynchronously associated with oceanic images; and twelve minutes of bell sounds in *Sydney Harbour Bridge* (*SHB*) (Winkler 1977), associated with images of glistening reflected light on water, also asynchronous. Whilst asynchronous sound is used in both films and can be associated with images of water, Winkler provides further visual layers of heterotopic and diegetically silent spaces: in *Bondi* there are no sounds relative to his images of traffic, seagulls, buildings, landscapes or cityscapes; and in *SHB*, there is merely silence in relation to images of the bridge itself, the primary focus of the film. These seemingly simple sound designs are deceptive though, for they provide a sonic foreground to further silent worlds within which a richness of possible sonic imaginings might be internally and subjectively 'heard' by the viewer.

This article first focuses on what the French film theorist Michel Chion refers to as *palimpsest* (2009: 165–71), the coexistence of sound and silent film, initially explored here through an examination of Winkler's *SHB*. Chion states:

> Every true sound film […] carries something of a silent film within. Sound film is partly silent film to which layers of audible and synchronized sound have been added – while not preventing the image from continuing to emit its own inaudible sound […] It is in this sense that we can call the sound

> cinema an art of palimpsest, where one layer covers over another that seems to be trying to be heard. (2009: 171)

The discussion of Winkler's *SHB* also utilizes Chion's further notion of *porosity* (2009: 487). Broadly, Chion defines porosity as 'when communication and circulation' occur between 'the real and imaginary spaces of a film'; for example 'when the (non-diegetic) pit music repeats the themes that have been heard in the (diegetic) screen music' (2009: 487). The following examination of Winkler's *Bondi* reveals similar palimpsestic traits and the manner in which porosity increases with the use of the sound of ocean waves is more obviously related to the images than the bell sounds used in *SHB*.

Lastly, historical instances of *subception* (subliminal auditive perception) are explored, and the concept of subception discussed as relative to the silent layers of Winkler's films. In her discussion of sound associated with silent European melodramas made prior to 1915, Dominique Nasta writes:

> When voices or music [or sounds in general] are only simulated [or depicted] visually, one has to find a justification for the inaudible sound. *Subception* [original emphasis] presupposes an indirect identification with such stimuli and a partial recording of visual information. When the viewer partially perceives and identifies an image, some information is already there, previously recorded. (2001: 96)

As further detailed below, the information 'previously recorded' is knowledge born of cultural and real-life experiences and stored in the viewer's long-term memory (LTM). Viewers of silent film, for example, in seeing a firearm being discharged, may experience a psycho-physiological effect and believe that the actual sound has been heard, or may imagine other sounds in the silent film diegesis, such as footsteps, a dog bark, or a clock ticking.

Terminology

The following analyses draw on a lexicon of analytical terms, including Chion's (2009) 'palimpsest' and 'porosity', and the term 'subception' as discussed by Nasta (2001). These terms are themselves primarily drawn from analyses of sound in narrative rather than experimental film, and while the divergence between the two is obvious, many terms used in narrative film sound analyses have been coined or derived to explain unconventional sound use; Chion's (1994: 198–213) application of his analytical terms to the prologue in *Persona* (Bergman 1966) is a prime example. Terms developed specifically for narrative film sound analysis can prove problematic when applied to experimental film. However, given that the analysis of sound in experimental film is necessarily heuristic, such standard analytical terms can be beneficial for gaining a clearer idea of the functions of sound in experimental films, even if the terms may need some adapting to this more specific context. As suitable terms are introduced into the analysis of the films here, their original definitions are provided, alongside discussion of their suitability.

An example is Chion's (2009) definition of 'palimpsest'. Previously noted is that sound in Winkler's films is asynchronous with the visuals, yet by Chion's definition, sound film as 'an art of palimpsest' is 'partly silent film to which layers of audible and synchronized sound have been added' (2009: 171). But Chion's idea of sound as a layer added to an existing and partially autonomous layer of silent film may make even more sense if it is applied to Winkler's films with their asynchronous sound, which emphasizes the partial autonomy of the layers.

Conversely, Chion's term 'porosity' relates to the movement of sounds between 'the real and imaginary spaces of a film', sounds that may include 'audio elements of speech, noise and music' (2009: 478). Given the minimal nature of Winkler's soundtracks, in my analyses the term is used more narrowly, referring to instances in which sound that primarily supports the sound film layer leaks or seeps through to the silent layer to become associated with visual elements shown in the silent layer.

Of the two different types of subception outlined above (either understood as a psycho-physiological effect, or understood to simply mean sound imagined by the viewer), it is in the latter sense that the term is utilized here. In Winkler's films there is nothing so dramatic as to result in a subceptive effect in the first sense of the term; but particularly in *Bondi*, sounds, of seagulls and of traffic, for example, may easily be imagined.

Paul Winkler

Born in Hamburg in 1939, Paul Winkler became a bricklayer by trade before migrating to Australia in 1959. His interest in film in the early 1960s led him to undergo a 'self-

education in film and film history' (Petzke 2009: 2) and to later become considered one of Australia's foremost experimental film-makers, particularly for his films made in the late 1970s. Winkler won numerous awards for his films of this period, and his works were celebrated in solo programmes in Canada and the United States (Gerbaz 2009: 57).

Winkler's focus on iconic Australian landscapes, including Bondi Beach, Ayers Rock (Uluru) and the Sydney Harbour Bridge, along with his visual technological developments and inventions, such as his Matte Box Image Shifter, are already well documented (e.g. by Gerbaz 2008: 6). Ingo Petzke remarks:

> The images in his films are clearly marked by the use of devices to create them. Winkler may briefly show the unaltered image in the beginning of a film. But inevitably processing will occur, and Winkler's low-tech invention pushes the possibilities of comparatively simple mechanics and long-known camera devices to their outer limits and beyond. (2009: 2)

While his visual innovations are certainly of interest technically, and indeed fundamental to his film-making process, the focus here is on Winkler's aesthetics: how these apply to his utilization (or non-utilization) of sound in his films, and how his approaches to sound draw on film practice and theory. The results of his film-making techniques are discussed primarily in relation to his use of sound.

A fragmented aesthetic

Fundamental questions arise when contemplating Winkler's sound in these two films. First, why use a singular sonic timbre for the duration of each film? Second, why not sonically support the numerous and varied images that are indeed silent? Answers to these questions lie principally in Winkler's own filmic aesthetic. According to Gerbaz:

> The significance of Winkler's films with respect to Australian landscape lies in a fragmented aesthetic that re-imagines each location […] His films slice up the world but then recreate it afresh through vibrant audiovisual juxtapositions. (2009: 56)

Visually, Winkler achieves this slicing up and recreation through the 'use of 'mattes' – an in-camera masking technique that allows multiple scenes to be combined in the same frame' (Gerbaz 2009: 56). With regard to *SHB*, we can expect to see the image of light reflected on water as a part of the environmental setting. In this film Winkler fragments this basic environmental connection by juxtaposing and layering images of the bridge itself in one set of mattes with another set that primarily focuses on reflected light on water. In *Bondi*, Winkler similarly fragments the beachside environment, often using one set of mattes to focus on ocean waves, while another set focuses on the surrounding environs of the beach.

Winkler's fragmented aesthetic also extends to the soundtracks of his films. In *Bondi*, and at one level, the use of the sound of ocean waves indeed provides a sense of cohesion and continuity. At another level, and in a dialectical relationship, there is a disconnection

between the two: the wave sounds we hear never correspond to the waves we actually see. In *SHB*, the continuous sound of bells provides cohesion, and though less obvious than the association of wave sounds and images in *Bondi*, an association can be made between the bell sounds and the sparkling reflections of light on water. But here, too, the association is weakened by the fact that the bell sounds are not really synchronized with the light reflected on the water.

Fundamental noise

Winkler uses no dialogue in either film. Nor is there any music, save for the random bell sounds in *SHB*, though the randomness means that they strain a conventional understanding of music as organized sound. There are no sound effects, save for the sound of the waves in *Bondi*. What is provided sonically in the films is a persistent and repetitive focus on what Chion refers to as *fundamental noise*:

> The continuous and undifferentiated sound into which symbolically all the other sounds of the film can fall or dissolve; the sound into which everything in a given film tends to be reabsorbed and pacified; either by covering over all other sounds at a given moment or by revealing itself as the background noise we hear when all the other noises fall silent or return to it. (2009: 478)

Fundamental noise is conceptually easy to understand given Chion's discussion of it as 'a primordial noise in the cinema… namely the noise of projection', particularly in the early days of cinema, when the noise of the projector was in close proximity to the

audience (2009: 455). Similarly understandable is his example of the sound of the shower in *Psycho* (Hitchcock 1960) 'that continues through the murder scene' (Chion 2009: 455). More speculative are Chion's examples of fundamental noise that are not continuous, and often only occur at the start and/or end of a film; the sound of gas in an anaesthesia mask or the sound of moving trains (2009: 454).

Superficially, the problem with Chion's concept of fundamental noise with regard to Winkler's films is that there simply are no 'other sounds' in either film; the fundamental noise in each film, in a further audio-visual dialectic, manifests itself as the actual soundtrack. Wherever direct or Foley sound might have been used, Winkler provides the viewer with nothing but silence. More important here may be Chion's reference to the way that 'other sounds' *symbolically* dissolve into the fundamental noise provided: in this respect the 'other sounds' in Winkler's films, in never being heard, are always dissolved into (perhaps drowned out by) the fundamental noise.

But do they *dissolve*? This would imply that they existed in the first place, as the sounds of seagulls, people and cars in *Bondi* do. Obviously, such sounds existed in the reality of the originally filmed environment, but if in the edited filmic environment they are stripped away at the outset, then they cannot dissolve – they do not exist to begin with! What then occurs in Winkler's films is a soundtrack consisting only of the fundamental noise that persists throughout, with all 'other sounds' relegated to silence, in other words a palimpsest of sound film in coexistence with silent film.

Palimpsest and porosity in *SHB*

In his analysis of the schoolyard scene in *The Birds* (Hitchcock 1963), Chion (2009: 165–71) argues that sound film is underpinned with silent film to form an audio-visual palimpsest. In this scene the sound film presents off-screen voices of children singing a repetitive folk song in their classroom, while the on-screen silent film, as Weis (1985: 307) describes, has the birds inaudibly increasing in number on the Jungle Gym in the school playground, the childrens' singing 'in counterpoint to [the birds'] ominous silence'. Chion (2009: 170) posits that this scene is an example of palimpsest: 'there is a silent film underneath the sound film, and this silent image vibrates with a sound we never hear'. The 'sound we never hear' in the scene is of course that of the birds, and in particular the sound of their flapping wings.

Palimpsest becomes evident in the opening minutes of Winkler's *SHB*. The film begins visually with unfocussed light sparkling on water (Figure 1), and as these visuals fade in, so too does the sound – the randomly pitched bells, similar to wind chimes in a breeze. While there is a disconnection between the visuals and the sound (no water sounds that might relate to the sparkles and no images of bells relating to the sound), the audio-visual combination does allow a psychological connection to be made between the two. This connection could be seen to be related to what Chion terms *synchresis*:

> The forging of an immediate and necessary relationship between something one sees and something one hears at the same time. (1994: 224)

> There is synchresis when the audio and visual events occur simultaneously […] it attributes a common cause to a sound and image, even if their nature and source are completely different and even if they have little or no relation to each other in reality. (2009: 492)

However, the use of the term in the context of the two Winkler films is problematic because the audio and visual events in *SHB* do not 'occur simultaneously'; no single light sparkle is perceived as corresponding directly with any one bell sound. Rather, there is a similarity between the two; the brief ephemeral nature of both, and the randomness with which they occur, that leads to a connection between them in a less synchronized type of synchresis than Chion defines, perhaps a pseudo-synchresis. By extension, the ephemeral and random sparkles can be understood as being *rendered* with the sounds of the bells. Rendering, as Chion points out, is not a sonic *reproduction* of sound (sparkles of light on water cannot of course produce any sound) but rather it is 'the use of sounds to convey the feelings or effects associated with the situation on screen' (1994: 224). Accepting that the rendering of the sparkles with the bell sounds results in a pseudo-synchresis, a connection between the two is established to form a pseudo-diegetic soundtrack for the film. Lasting around 25", Winkler's opening can thus be seen to establish the 'sound film' component of the *SHB* palimpsest.

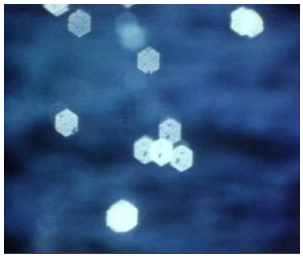

Figure 1: *SHB* – 22".

At 41” there is a shift to what will be referred to as the ‘silent film’ component of the palimpsest. A cut to two mattes (Figure 2) appears suddenly, as Winkler jolts the viewer from the prior close-up view of night sparkles, into a daylight/landscape view of the bridge. Providing a sense of continuity, the same bell sounds remain, as they do for the entirety of the film.

Figure 2: *SHB* – 41”.

An increasing number of mattes divides the visuals, up to five at a time (Figure 3). Panning of the bridge provides considerable visual movement with some bridge images moving left to right, others right to left. At times, single mattes are also superimposed and provide further movement, the background and superimposed foreground panned in opposite directions (Figure 4).

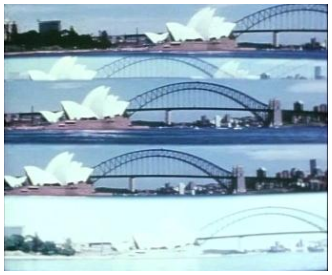

Figure 3: *SHB* – 47”.

Figure 4: *SHB* – 1’09.

At this point, a different application of Chion's concept of 'porosity' suggests itself: As the bridge mattes begin to dominate the visuals, the sonic connection between the sparkles and the bells of the opening diminishes, and the persistent sounds can begin to be associated with the bridge images, leaking from the palimpsestic sound layer to the silent layer. Occasional images of the bridge fading out also relate to the sonic decays of the bells after being struck. A cut to faster and seemingly more random bridge images (Figure 5), and panned movement in the mattes, provide further associations with the random bell sounds.

Figure 5: *SHB* – 58".

At 1'10 this relationship ceases, another cut seeing the multiple mattes replaced by a view of sunlight sparkling on water, a daytime version of the opening that immediately re-establishes the earlier sonic connection with the bells. At the centre of the screen is a small matte containing panned and superimposed images of the bridge (Figure 6). The overall visual combination here presents the palimpsest proper, the re-established sonic relationship between the bells and sparkles belonging to the sound film, the images of the bridge belonging to the silent film. These visual processes then continue in a similar

fashion, with Winkler adding and subtracting further mattes of varying size. Importantly, the sparkling water image is always present, reinforcing the palimpsest.

Figure 6: *SHB* – 1’10.

At 7’14 a final and significant focus on the bridge has sixteen mattes (Figure 7). Lasting eighteen seconds, the sequence is long enough for synchresis to well develop and for porosity to occur. This is aided by Winkler’s treatment of the mattes – essentially visually looped images starting at one side of the bridge, tracking up over its arch, and down to the other side. Start points and loop lengths in the mattes are each different, resulting in an apparent randomness. As the sequence progresses this randomness becomes increasingly associated with the randomness of the bell sounds. In particular, synchresis could be seen (and heard) at work between the bell sounds and the randomly appearing pylons of the bridge (shown in four of the mattes in Figure 7). Following this sequence, the film once again includes the images of sparkling water that remain until the end, for the final time re-establishing and maintaining the palimpsest.

Figure 7: *SHB* – 7'14.

Palimpsest and porosity in *Bondi*

Winkler's *Bondi* (1979) is also palimpsestic, utilizing the sounds of ocean waves (the fundamental noise of the film) in conjunction with images of waves. Unlike *SHB*, wherein the silent film is focused exclusively on the bridge, in *Bondi* Winkler presents a wide range of visuals that capture the essence of Sydney's beachside suburb of Bondi in the late 1970s with people, buildings, shops, traffic, cars, seagulls, rubbish and flora. Given that none of these visuals are supported by sound (either direct or Foley), they could be considered as the silent components of the film. This is a rather simplistic distinction, however, for porosity can disrupt the silent/sound film palimpsest, and does so in *Bondi* at levels rather more complex than in *SHB*. Before focusing the discussion on porosity, some examples will illustrate the palimpsestic nature of the film.

Figure 8 represents an example of pseudo-diegetic sound as it operates in *Bondi*: This fifteen-second sequence asynchronously associates the sound of waves with images of ocean waves on rocks. In providing further visual interest, Winkler also places a sky matte at the bottom of the screen to visually centralize the 'sound film' level, thus focusing the viewer's attention on the sound/image relationship.

Figure 8: *Bondi* – 7’38.

Figure 9 is from a sequence of the silent film component: A bus and traffic move past in the background, while seagulls squabble in the foreground, all unheard. Combining both silent and sound film in the one sequence, Figure 10 shows two mattes, the upper with pseudo-diegetic wave sounds relative to sound film, and the lower, in which the people are clearly conversing, being silent.

Figure 9: *Bondi* – 1’38.

Figure 10: *Bondi* – 38”.

In Figure 11, a sky matte above and (presumably) a father and young son conversing on the beach in the matte below, the distinctions between sound film and silent film components become blurred. The waves are clearly associated with the sounds (as in the Figure 10 sequence), yet are also clearly a part of the diegesis in which the father and son appear. Though at some distance (and there is the possibility of their conversation being drowned out by the waves), we might expect to hear something of their voices. However,

and as is the case for the rest of the film, there is only silence with regard to anything other than the ocean.

Figure 11: *Bondi* – 10'17.

If the ocean sounds in the Figure 11 sequence can be considered as on-screen or diegetic sounds, and hence understood as being in the same space-time continuum as the man and boy, can the non-diegetic wave sounds that accompany the sequence represented by Figure 9 be similarly understood? Taken at face value, the Figure 9 sequence could be footage of any city suburban street; there are obviously no waves to be seen. Yet the presence of the seagulls, indicates close proximity to the sea, which would realistically be audible as off-screen sound, and hence understood as belonging in the same time-space continuum as the bus, traffic and gulls.

As discussed previously, the sound film component of *SHB* arises out of the rendering of the sparkles of light with the sounds of bells, and the occasional porosity that occurs is a result of the absence of the sparkles. In *Bondi*, the sounds of the waves are real as opposed to rendered, and though asynchronous with the waves shown on screen a pseudo-synchresis occurs whenever images of waves are shown. Posited here is that, because the wave sounds are realistic, porosity occurs throughout the film, leaking

through from the sound film to the silent film whenever images of waves appear in combination with images from the silent film. In images where waves are not visually present, the wave sounds are understood to be part of the same space-time continuum, a natural (and omnipresent) part of the suburban Bondi environment.

Subception

Film theorist Rudolph Arnheim explains that no one who went to watch a film in the silent film era;

> missed the noises which would have been heard if the same events had been taking place in real life. No one missed the sound of walking feet, nor the rustling of leaves, nor the ticking of a clock [… In] order to get a full impression it is not necessary for [a film] to be complete in a naturalistic sense. All kinds of things can be left out which would be present in real life, so long as what is shown contains the essentials. (1957: 33)

Dominique Nasta specifies that auditive parameters may belong to two groups: 'extra-filmic (accompaniment by noise or music-making, by original music […] or by cue-sheets for illustrated songs) or intra-filmic (markers in the visualized discourse without an aural actualization)' (2001: 96–97). Nasta explains that intra-filmic sound occurs when 'sounds are visualized [on screen] so as to ensure that they are somehow associated with the act of real hearing or listening'. In her analyses of intra-filmic sound she focuses

'largely on the phenomenon psychologists have called *subception*, or "subliminal auditive perception"' (Nasta 2001: 96).

Numerous authors have focused on examples of subception. A classic example cited by many, e.g. Altman (1996: 648) and Szaloky (2002: 116), was reported in a 1904 newspaper article (from *The Philadelphia Enquirer*) on a showing of *The Great Train Robbery* (1903). 'There is a great amount of shooting… but no sound is heard. Nevertheless, while witnessing the exhibition women put their fingers to their ears to shut out the noise of the firing' (cited in Altman 1996: 648).

Raynauld (2001: 69) gives an idea of the extent of subception in silent film, having examined 5348 French films made between 1896 and 1915. Within these, as 'many as 3,616 sound occurrences have been inventoried… divided into fourteen categories beginning with *noise, screams, silence, hearing, listening, singing, music* and *dance*' (Raynauld 2001: 71, original emphasis). The remaining categories relate to 'speaking postures', 'namely: *to announce, to ask, to call, to command, to laugh,* and, of course, *to speak*' (Raynauld 2001, original emphasis).

More specifically, Nasta (2001: 97–100) examines a silent film scene that she considers 'may serve as a paradigm for *subception* occurrences': the sounds associated with the bell-ringer in *La Légende du vieux sonneur/The Legend of the old bellringer* (de Morlhon 1911). In this religious melodrama, the Devil has immobilized the church bells, and the bell-ringer is under threat of being burned as a heretic if he does not ring the Angelus. An angel appears to the bell-ringer as a beggar, and in sympathy the bell-ringer takes her to his home, where hidden behind a curtain she witnesses a visitation by the Devil to the bell-ringer. Slipping out of the room unseen, the angel goes to the church and

rings the bells for the bell-ringer. Hearing the bells from his home, the bell-ringer 'cannot believe his ears' and rushes to the church to find the angel ringing his bells. In relation to this scene, Nasta (2001: 100) asserts: 'what clearly motivates the story's continuity and suspense are the sound elements related to the act of ringing'.

By the end of the silent film era, subception was used at varying levels. Szaloky (2002), in her analysis of the essentially silent film *Sunrise* (Murnau 1927), discusses numerous instances. One of her examples relates a 'near-climactic effect through a series of visualized [subceptive] sounds that alert the spectator to the disparity between the main characters' intentions, knowledge, and emotional states' (Szaloky 2002: 124).

Within this series of subceptive sounds is a water splash as a dog leaps into a lake chasing its owners, a rural husband and wife in a rowboat. For the wife, this splash portends something of her husband's intent to drown her so that he may join his lover in the city, though the wife is unaware of his intent. The splash of the dog 'takes her utterly unaware, making her turn around abruptly… [it] calls the wife's attention to the dog's strange behaviour and fills her with a sense of unease' (Szaloky 2002: 125). Subceptive sounds occurring prior to this in the scene are evoked by visuals of the dog's violent and continuous barking, and in combination with the dog's chase and splash into the water, suggestive for the viewer of the sense of unease in both the husband and the wife.

Christian Metz, in discussing his research as a 'cinematographic analyst', asks 'how could I hide from myself […] the fact that an entire body of previous cultural knowledge […] already present in my immediate perception is necessarily mobilized to make it possible for me to work?' (1985: 159). Metz is referring to what Nasta (2001: 96)

describes as the information that is 'already there, previously recorded' knowledge born out of cultural and real-life experience and stored in LTM.

Edward Branigan, as discussed by Szaloky, 'posits two broad ways of perceiving sound in film (which are analogous to our perception of sound in real-life situations)' (Szaloky 2002: 115). Branigan states:

> Some perceptual processes operate upon data from the loudspeakers (and data appearing on the screen) primarily in a direct, "bottom up" manner by examining the data in very brief periods of time (with little or no associated memory) and organizing it automatically into such features as aural pitch, loudness, edge, depth, motion, size, shape, colour, texture, and so on […] Other perceptual processes, however, based on acquired knowledge, memory and schemas (frames, scripts), are not constrained by stimulus time, and work primarily "top-down" on the data using a spectator's expectations and goals as principles of organization. (1997: 105)

Branigan's ideas are extended in Annabel Cohen's Congruence-Associationist Framework, which 'emphasizes that music is a vehicle transporting a variety of information, only some of which is relevant to a particular cinematic goal' (Cohen 2000: 370–71). Cohen states that 'we can consider music to have two components: an affective component and an acoustical, structural component'. The acoustic component is relative to data considered by Branigan to belong to the 'bottom-up' perceptual process, perceived as pitch, loudness etc. In Cohen's framework, such data is 'transferred' to short-term

memory (STM), where it must be matched with an individual's acquired knowledge and past experience residing in his or her LTM. 'Assuming that experiences in LTM include affective tone, it is conceivable that a matching process [top-down] would take place for visual and affective information from a film' (Cohen 2000: 373).

Branigan points out that in viewing film, both top-down and bottom-up cognitive processes are:

> at work every moment […] cognition as a whole is best thought of as a system which struggles to manage incomplete, ambiguous, deceptive, and often conflicting interpretations of data. The perceiver must actively search, compare, test, discriminate, remember, and speculate within many realms and imagined contexts. (1997: 106)

Wherever 'incomplete' or 'ambiguous' bottom-up data is presented in film, for example the silent barking or splashing of the dog in Murnau's *Sunrise*, top-down cognitive processes are evoked. As Szaloky explains;

> Because top-down (or schema-driven) processes are active in watching a film, sound need not be limited to its existence as a bottom-up percept tied to an actual acoustic stimulus. Nor should it always play second fiddle to light and vision, given that a spectator's goals, expectations, and projections (which govern the top-down mode of perception) may be other

than recognizing or verifying the physical shape, material, identity, and whereabouts of an object. (2002: 116)

Identifications with the heard and the unheard

Anahid Kassabian (2001), in her analyses of compiled music soundtracks in contemporary Hollywood films, presents the concept of *affiliating identifications*. The level of viewer or 'perceiver' identifications with a filmic character, place, time or situation will, through the use of a particular song, theme or musical genre within a film's soundtrack, vary according to 'the perceiver's own psychic formations and histories' (Kassabian 2001: 142). In relation to 'the heard' in Winkler's films, and although neither *Bondi* or *SHB* contain musical materials of the types discussed by Kassabian, the simple sounds provided can aid in perceptions of identification similar to those she discusses. Especially with *Bondi*, those with experience of this iconic beach (or for that matter any popular surf beach) might engage in some level of affiliating identifications as aided by their familiarity with the sounds of the ocean waves. In *SHB*, bell sounds in association with sparkling water, combined with Winkler's visually playful fragmenting of bridge images, may provide a more simple and perhaps global sense of identification, an affiliation of sparkling harbour waters with a sense of beauty, joy or charm.

Affiliating identifications also arise through a range of subceptive possibilities from the 'unheard' dimension of Winkler's films. Some possibilities are related below, the affiliating identifications made being drawn from, first, a personal knowledge and experience of Winkler's settings, and second, reflection following multiple viewings of these settings as portrayed by Winkler.

Subception in *Bondi*

Possibilities of subceptive occurrences, with regard to the 'physical shape, material, identity, and whereabouts' (Szaloky 2002: 116) of objects (and/or people) are clearest in Winkler's *Bondi*. For viewers who have experience of a beachside urban environment, the example discussed above (see Figure 9) with its bus, traffic and seagulls, may suggest the subceptive imagination or perception of the squawking of the gulls or the sound of their flapping wings. Similarly, it is not difficult to concurrently perceive the sound of the bus or cars. Further imaginings could include the squelching of bare feet walking on hot sand (Figure 12), the general din of a crowded beach (Figure 13) and the indistinct laughter, calls, shouts and squeals of children as they take delight in the waves (Figure 14).

Figure 12: *Bondi* – 4'06.

Figure 13: *Bondi* – 12'43.

Figure 14: *Bondi* – 13'57.

These possible subceptive sounds may contribute to an understanding of *Bondi* at a further level, supporting Winkler's interest in depicting 'the carefree atmosphere of the beach captured with the innocence of early cinema' (1995: 45). Gerbaz, reflecting on

Winkler's statement writes that this 'association of the beach with "innocence" gives an indication of his views about the natural world… *Bondi* privileges the beach as a place of free, disorganized behaviour and interaction with the environment' (2009: 59).

The 'free, disorganized behaviour' that Gerbaz speaks of is a fundamental attribute of Australian beach culture. Filmed at the end of the tumultuous decade of the 1970s, *Bondi* reflects at a surface level the leisure and freedom that it indeed 'privileges'. As Walsh points out, the decade was, for 'the newly emerged young professional class… the laid-back decade' (1979: 5).

If subception is perceived within *Bondi*, its occurrences are interspersed with and interrupted by the images of waves that are combined with the fundamental noise of the ocean that Winkler provides. While there are numerous further places in the film where subception might occur, there is nevertheless a rift between visuals and soundtrack: on the one hand we see images that can be related to the actual soundtrack provided by Winkler, but on the other hand, these are interspersed with images that may evoke sound through subception. This fragmentation relates to Winkler's desire to depict 'the carefree atmosphere of the beach' and the free and disorganized behaviour of which Gerbaz speaks.

Subception in *SHB*

Unlike the examples of subception in silent films that may arise out of the familiar sounds of guns shooting, bells ringing, and dog sounds, and in *Bondi*, the sounds of traffic, gulls, feet on sand and children in the ocean, in *SHB* possibilities of subception arise at a more abstract level, since the bridge itself produces no such familiar sound.

However, Winkler does aid the possible 'hearing' of subceptive sound through his animating of the realistically static bridge.

If subception is to occur with *SHB*, it is more likely to arise from the viewer's own personal knowledge and experience of the bridge. The viewer may well be aware of the history of the bridge, and its status as an Australian icon. The bridge is 'seen as a symbol of Australia's industrial maturity… Along with the city railway, the bridge is the most important event [*sic*] in the development of Sydney's transport system and has been in continuous use as such for over 60 years' (RTA 2007: 150). Completed in 1932 and considered as an 'engineering masterpiece, the bridge represented a pivotal step in the development of modern Sydney and an important part of the technical revolution of the 1930s' (DEWHA 2010: 42).

Many viewers' personal experiences of the bridge will, in the aural domain, primarily include the sounds of transport and most importantly the sounds of the trains that continuously rattle and clank their way across the structure. Winkler's visual animating of the bridge through his panning and superimposing often provides a sense of movement, as if the bridge is being viewed in passing from the window of a train. This is particularly so where Winkler focuses on the hangers that support the bridge's deck, as shown in the three frames of Figures 15–17. With such images and the sense of movement provided, the possibility of subception of train sounds arises.

Figure 15: *SHB* – 3’07.

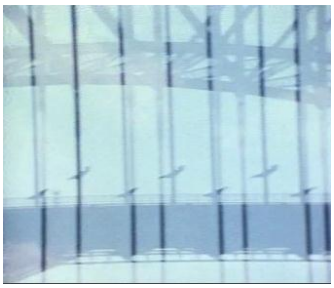

Figure 16: *SHB* – 3’07.

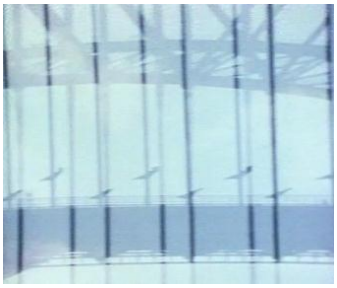

Figure 17: *SHB* – 3’07.

Just as images such as the sparkles in *SHB* may be rendered with sound, visualized sound may also be subceptively rendered. Chion (2009: 6) comments on Murnau’s *Sunrise* (1927): ‘all movement, such as the shimmering water behind Janet Gaynor in the rowboat […] is automatically suggestive of sound’. In addition to the possible subception of train sounds, the movement of the bridge that Winkler achieves may similarly give rise to further subceptive sound, particularly given the personal knowledge a viewer may have of the bridge’s association with industry and technology. There is something highly mechanical perceived from this movement, a result of the panning and repetition of the bridge images as they move rhythmically from side to side. Subceptively then, the viewer may well perceive the repetitive sounds of machines or factories.

Should viewers subceptively indulge in the imagination of such mechanical sounds, they may, especially on repeated viewings of the film, sense these sounds becoming more chaotic or random, a sense that emerges from Winkler’s gradual increase in the speed of his panned images of the bridge, as well as an increasing number of mattes and superimpositions presented over the course of the film. For example, near the start of the film slow moving images of the whole bridge appear, and perhaps the sounds of regular passing traffic are suggested (Figure 18). By the end, complex mattes and rapidly moving

fragmented images of the bridge may sonically suggest something much more chaotic, sounds of a forge or foundry perhaps (Figure 19). The increase in complexity in the visuals and in any imagined sounds, can contribute to a sense of unease in the viewer, again in line with Winkler's fragmented aesthetic.

Figure 18: *SHB* – 1'22.

Figure 19: *SHB* – 11'54.

Conclusion

Winkler's simple design for sound in both *SHB* and *Bondi* serves to support the palimpsestic sound film layers of each film and to provide continuity for the disparate and fragmented images he presents. In the former film this is through an abstract association of light sparkling on water rendered with bell-like sounds, in the latter through a more realistic association of water and waves with the sounds of the ocean.

Sound in *SHB* can on occasion be understood to support images of the bridge, particularly where these exclude the images of sparkling water. In these instances porosity occurs, the sound that usually supports the sparkling water seeping through to the silent layer to be associated with the usually silent bridge. Porosity in *Bondi* is more extensive, the sounds of waves, understood to belong to the sound layer, are also present in the silent layer, either as a sonic backdrop when images of the ocean are combined

with otherwise silent images, or understood as belonging to the same time–space continuum of images wherein waves are not visually present.

In providing simple sound designs that primarily relate to a single visual element, sparkling water or ocean waves, Winkler invites the viewer to imagine sounds that are relative to the images that he keeps in silence. Through subception, and depending on the viewer's personal experience of a site or environment, some sounds are easily imagined, such as that of seagulls or of traffic in *Bondi*. In *SHB,* as the bridge itself makes no sound, Winkler's sound may simply provide a sense of playfulness or charm. Subception, as a dimension of the 'unheard' or silent layer of the film may occur at a more abstract level and evoke in the viewer sounds associated with the bridge, of traffic and trains. More abstractly again, through Winkler's visual animation of the bridge and a viewer's knowledge of it as a symbol of Australia's industrial maturity, subception might evoke more mechanical and industrial types of sounds, these increasing in complexity as relative to an increasing complexity of the mattes and superimpositions presented in the visuals.

The palimpsestic presentation of sound and silent film, the blurring of the two through porosity, and invitations by Winkler to imagine both realistic and abstract sounds for the silent visuals he presents, can all contribute to a sense of fragmented sonic landscapes. The subceptive sounds of these landscapes may be perceived, or affiliated with, in different ways by the viewer depending on his or her knowledge and experience of the settings of the films, and the times of their capture.

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