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EXTRA-VOCAL SOUND AND CONDUCTING GESTURE IN *CLOUDBURST*: A CONDUCTING ANALYTICAL PERSPECTIVE

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Abstract:

This paper aims to analyse the conducting gestures and techniques required to realise extra-vocal sound in *Cloudburst*, a widely performed work by Eric Whitacre in the contemporary choral repertoire. Rather than relying solely on pitched singing, *Cloudburst* incorporates air sounds, body percussion, indeterminate vocal noise, and spatialised sound actions to evoke natural phenomena such as wind, rain, and thunder. Using a conducting-analytical perspective, this study examines how these sound-generating actions function structurally and expressively and how conductors translate them into coherent musical outcomes through gesture design and rehearsal practice. The study employs three phases of inquiry: score analysis, rehearsal-based observation, and conducting reflection. Particular attention is given to conducting gestures, dynamic control, rhythmic coordination, and spatial organisation in rehearsal and performance contexts. The findings suggest that the integration of extra-vocal sound significantly expands choral expressivity while placing increased demands on the conductor's physical communication, rehearsal planning, and interpretative decision-making. The study contributes practical conducting strategies grounded in professional practice, this paper offers pedagogical insights into contemporary choral conducting and performance practice.

Keyword:

Cloudburst, Choral Conducting, Eric Whitacre, Extra-Voice Sound

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Introduction

Eric Whitacre's choral work *Cloudburst* exists in two versions, a choral version and an orchestral version. Composed in 1995 and inspired by Octavio Paz's poem *The Cloudburst*, the work is widely recognised for its distinctive sonic imagination and evocative depiction of a rainstorm, from its initial formation to its eventual eruption (Grassi, 2010). Rather than relying solely on pitched singing and conventional harmonic progression, *Cloudburst* incorporates a range of extra-vocal sound materials, including air sounds, body sounds (such as snapping fingers and high fives), non-traditional vocal timbres, and spatialised sound design. These elements generate a strong sense of immersion by mimicking natural phenomena such as wind, raindrops, and thunder. While such sound materials have often been discussed in relation to Whitacre's compositional language and atmospheric effect, their implications for conducting gesture and rehearsal practice merit closer examination.

Air sounds and accents constitute one of *Cloudburst*'s core expressive devices, representing subtle variations of nature through indeterminate pitch and dynamic nuance. From a conducting perspective, these sounds require particular attention to dynamic control, breath coordination, and rhythmic cohesion in rehearsal, as the conductor must guide singers to sustain musical continuity without the support of fixed pitch structures (Wilkes, 2017). Body sounds, including snapping fingers and high fives, function as rhythmic representations of rainfall, evolving from sparse gestures to dense, cascading textures. For the conductor, this process demands precise control over entrances, pacing, and accumulative intensity in order to preserve both clarity and dramatic momentum.

In addition, non-traditional vocal timbres—such as non-fixed pitch chanting and blurred vocal boundaries—further increase the expressive and technical demands placed on performers (Mabry, 2002). These challenges foreground the conductor's role in maintaining musical coherence through flexible gesture, refined dynamic shaping, and attentive listening across the ensemble. Another significant feature of *Cloudburst* is its spatial sound design, which often requires singers to be positioned in different locations, *including* around the audience. While this spatialisation enhances the immersive quality of the work, it also places heightened demands on the conductor's ability to coordinate ensemble balance, visual communication, and rehearsal planning in performance contexts.

Overall, the integration of extra-vocal sound materials in *Cloudburst* has a profound impact on conducting practice. Beyond technical competence, conductors must develop strategies to translate these unconventional sound actions into coherent musical and emotional outcomes through gesture, rehearsal structure, and interpretative decision-making (Krudop, 2003). From a conducting analytical perspective, this study examines how conducting gestures function as a mediating tool between extra-vocal sound, ensemble coordination, and expressive realisation

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in *Cloudburst*, thereby contributing pedagogical insights into contemporary choral conducting practice.

Score Analysis on the Non-Verbal Elements

This section outlines the formal framework within which extra-vocal sound actions are structurally deployed, providing an analytical point of reference for the subsequent discussion of conducting practice.

Table 1: Formal Structure and Tonality of *Cloudburst*

Structure	The Non-Repetitive Triple-Movement Form						
Primary	First Section						
Secondary	A		Link (Baritone solo)	B		A1	Link (Speaker)
Tertiary	a	a1		b	b1	a2	
Bars	1—6	7—9	10—10	11—16	17—27	27—32	32—34
Tonality	A Major			E minor		A Major	

Primary	Middle Section					
Secondary	C		E		F	Link (Soprano Solo)
Tertiary	c	d	e	f	g	
Bars	34—39	39—42	43—46	47—52	53—57	58—59
Tonality	E minor		G Major	B Major		A Major

Primary	Coda		
Secondary	First coda material	Second coda material	Third coda material
Tertiary			
Bars	60—69	70—75	76—84
Tonality	A Major		

Source: Table Compiled by the Author Based on Score Analysis of *Cloudburst* (Whitacre, 1996).

As summarised in Table 1, *Cloudburst* is organised into three main structural divisions: an opening section, a middle section, and a concluding coda. The opening section presents an A–B–A1 formal layout connected by linking passages that introduce distinctive performative elements, including baritone solo and spoken text. This section establishes the predominantly a cappella sound world of the work while gradually preparing the listener for the integration of extra-vocal materials.

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The middle section develops the musical texture through a sequence of contrasting tonal areas (E minor, G major, and B major), creating increasing harmonic colour and textural expansion. Within this section, Whitacre gradually intensifies the sonic environment of the piece, culminating in a linking passage featuring solo soprano and air sounds that foreshadow the atmospheric climax of the work.

In the final section, the coda consolidates the musical material through the incorporation of body percussion and full ensemble participation. These extra-vocal sound actions function not merely as decorative effects but as structural elements that contribute to the climactic sonic image of the rainstorm. This formal organisation, characterised by evolving texture and the strategic deployment of non-pitched sound, reflects Whitacre's broader compositional emphasis on sonority and atmosphere (Grassi, 2010; Hall, 2012; Larson, 2004).

The Conductor's Perspective on Non-Verbal Communication with the Performers

In Eric Whitacre's *Cloudburst*, the use of non-verbal elements such as air sounds, finger snapping, thigh tapping, and clapping constitutes a central expressive feature of the work. These extra-vocal sound materials enrich the rhythmic and emotional palette of the choral texture while enabling the piece to move beyond conventional pitch-based choral writing. Such practices can be situated within a broader twentieth-century tradition of extended vocal and non-pitched sound techniques, in which the voice is treated as a flexible sound-producing medium rather than a purely melodic carrier (Mabry, 2002; Crump, 2008; Montgomery, 2005). Within this performative context, the conductor assumes a crucial mediating role. Beyond the precise coordination of sound actions, the conductor must ensure that extra-vocal elements integrate coherently with the sung choral parts in order to maintain expressive clarity and dramatic continuity (Johnson, 2019). Bodily communication—particularly gesture and facial expression—therefore becomes central to the successful realisation of these sound materials.
Air sounds are frequently employed to express subtle emotional fluctuations and to evoke natural phenomena such as wind or rain. As these sounds rely solely on controlled airflow rather than fixed pitch, they contribute an ethereal and transparent sonic texture, particularly effective in the articulation of atmospheric states. For example, in bar 59 of *Cloudburst* (Figure 1), air sounds are used to suggest the presence of wind immediately preceding the storm.

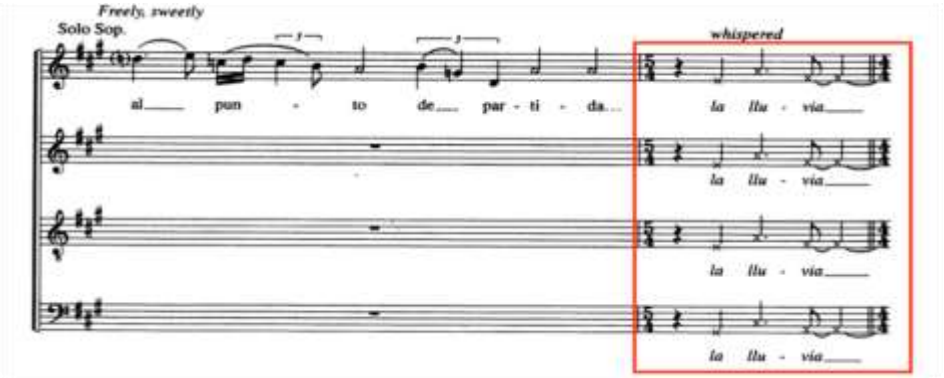

Figure 1. Eric Whitacre, *Cloudburst*, SATB Score, Bars 58–59 (Air Sounds).
Source: Whitacre (1996)

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From a conducting perspective, the effective realisation of air sounds depends primarily on physical communication rather than verbal instruction. Previous studies have identified conducting gesture as a form of non-verbal communication that shapes performers' perceptions of timing, intensity, and expressivity (Ford, 2001; Krudop, 2003; Luck et al., 2010; Poggi et al., 2020). In practice, the conductor must employ highly restrained gestures and subtle bodily cues to guide singers' breath control and sustain ensemble cohesion. Because air sounds lack rhythmic anchoring and pitch reference, continuity is maintained through gentle, sustained motions, complemented by focused eye contact and minimal facial cues. Such restrained gestural strategies function to stabilise collective airflow while preserving an atmosphere of sonic fragility.

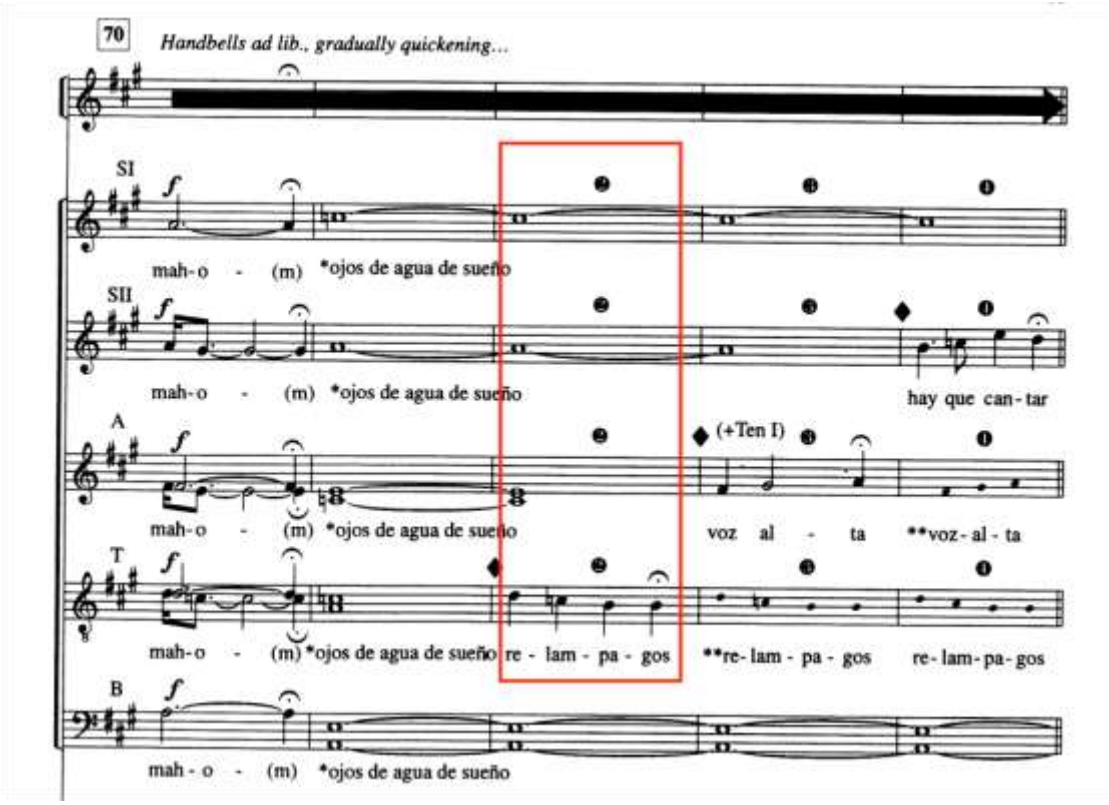

Figure 2: Eric Whitacre, *Cloudburst*, SATB Score Bars 70-74 (Finger Snapping).
Source: Whitacre (1996)

Snapping fingers represent another characteristic non-verbal element in *Cloudburst*, functioning as a sonic analogue to falling rain and contributing to the work's dramatic escalation. Whitacre has noted that this gesture derives from a traditional campfire game, adapted to serve the expressive needs of the composition (Swan, 2016). In bars 70–74 (Figure 2), finger snapping is marked to crescendo, symbolising the onset of the rainstorm. Here, the conductor must demonstrate precise rhythmic control and clearly differentiated gestural cues to coordinate the accumulation of sound while maintaining alignment with the sung choral parts. Rapid, clearly articulated gestures—often differentiated between hands—enable the conductor to shape both rhythmic intensity and vocal coordination simultaneously.

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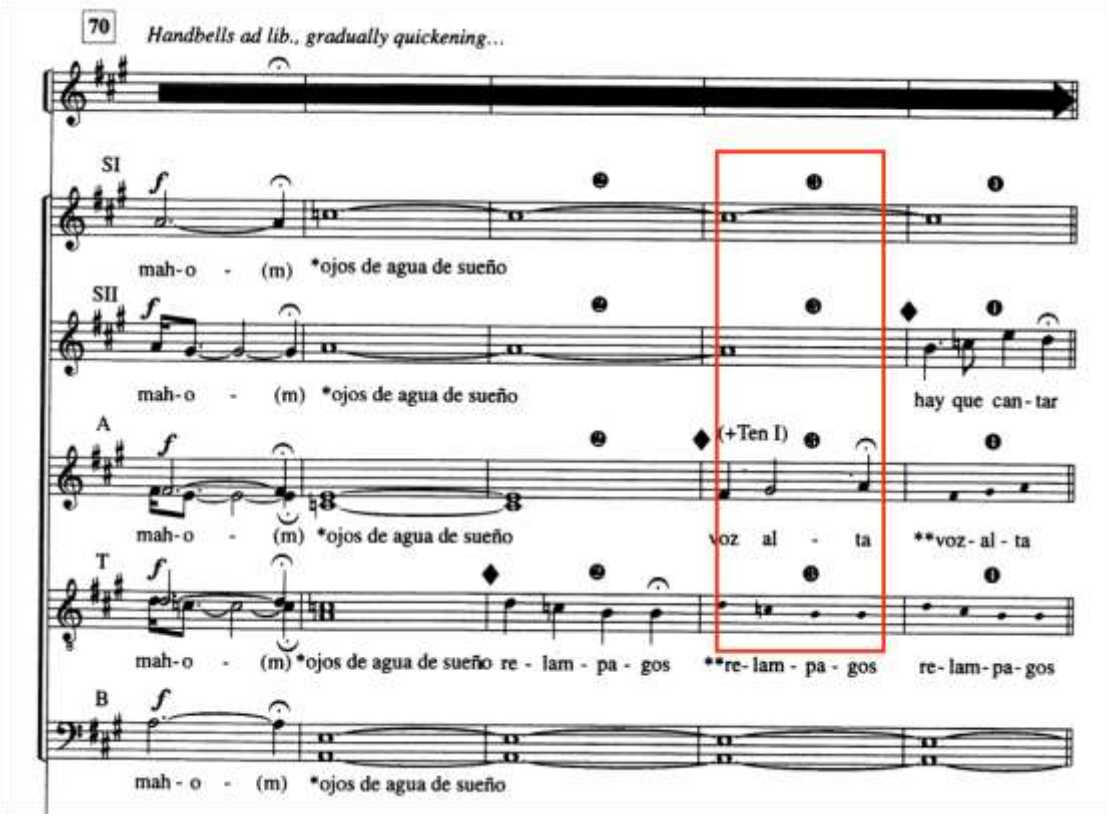

Figure 3: Eric Whitacre, *Cloudburst,* SATB score bars 70-74.
Source: Whitacre (1996).

Thigh tapping is employed as a percussive device that further intensifies the sonic representation of rainfall, suggesting the impact of rain on varied surfaces. This embodied sound action expands the work's textural palette while enhancing the listener's sensory engagement with the natural imagery. In bars 70–74 (Figure 3), choir members are instructed to tap their thighs without a fixed rhythmic pattern, producing a dense, irregular texture. From the conductor's perspective, this requires careful preparatory cueing and continuous gestural guidance to balance freedom of execution with ensemble coherence. The conductor must therefore negotiate between controlled timing and performative openness, ensuring that the resulting texture remains integrated within the overall musical trajectory.

Clapping constitutes the most overtly collective non-verbal gesture in *Cloudburst*, intensifying the sonic impact at moments of heightened tempo and emotional intensity. As shown in bar 74 (Figure 4), clapping is indicated without strict uniformity, allowing natural rhythmic variation to enhance the vividness of the soundscape. The conductor's role in this context shifts from enforcing precision to shaping collective energy, using visible bodily gestures to cue entrances and regulate intensity rather than to impose strict rhythmic alignment. This shared physical action reinforces ensemble participation and strengthens the connection between performers and audience, transforming the choral texture into a multisensory expressive event.

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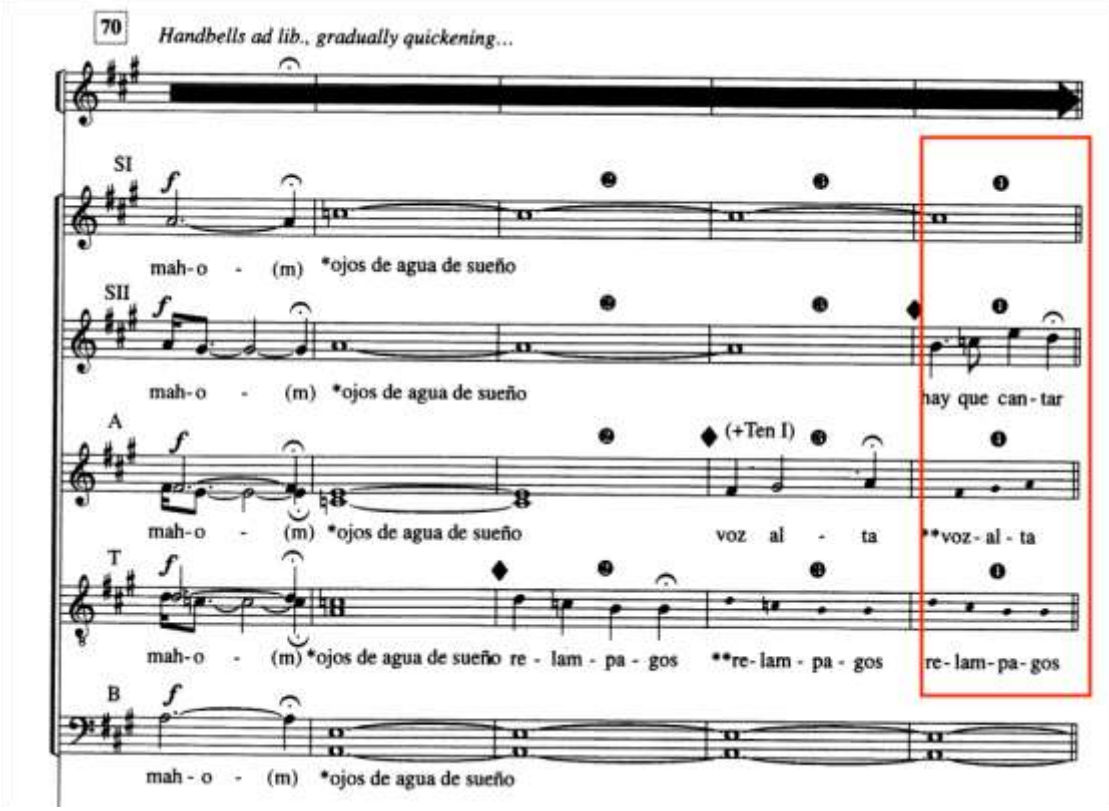

Figure 4: Eric Whitacre, *Cloudburst,* SATB score bars 70-74 (clapping).
Source: Whitacre (1996).

From a conducting standpoint, these body-based sound actions rely on clearly differentiated gestural cues and nuanced intensity signalling, which may be understood as part of an expressive gesture grammar rather than as purely mechanical beat indication (Gibet, 2024). Through the integration of air sounds, finger snapping, thigh tapping, and clapping, *Cloudburst* exemplifies how non-verbal sound practices reposition the conductor as an embodied mediator of sound, gesture, and collective attention. The conductor's role thus extends beyond traditional rhythmic control to encompass leadership in non-verbal expression and embodied musical communication.

Challenges in Conducting *Cloudburst*

In *Cloudburst*, the challenges faced by the conductor arise primarily from the work's extreme dynamic range, dense harmonic language, and the integration of multiple non-verbal sound actions within a highly expressive musical framework. These challenges require conductors to negotiate continuously between technical precision and expressive flexibility. From a conducting analytical perspective, such negotiation foregrounds conducting practice itself as a site of problem-solving, reflection, and pedagogical knowledge production (Wilkes, 2017; Nelson, 2022).

One of the most immediate challenges lies in the management of dynamic contrast. *Cloudburst* traverses an exceptionally wide dynamic spectrum, ranging from pp passages characterised by air sounds and fragile vocal textures to climactic ff sections involving full ensemble participation (Figures 5 and 6). Conductors must therefore ensure that dynamic

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transitions remain controlled and coherent rather than abrupt or overwhelming. Excessive dynamic force may compromise vocal balance and intonation, while insufficient control at softer levels risks the loss of textural clarity. Through carefully calibrated gestural restraint and anticipatory cueing, conductors can shape gradual dynamic trajectories that preserve both vocal health and expressive intensity during rehearsal and performance.

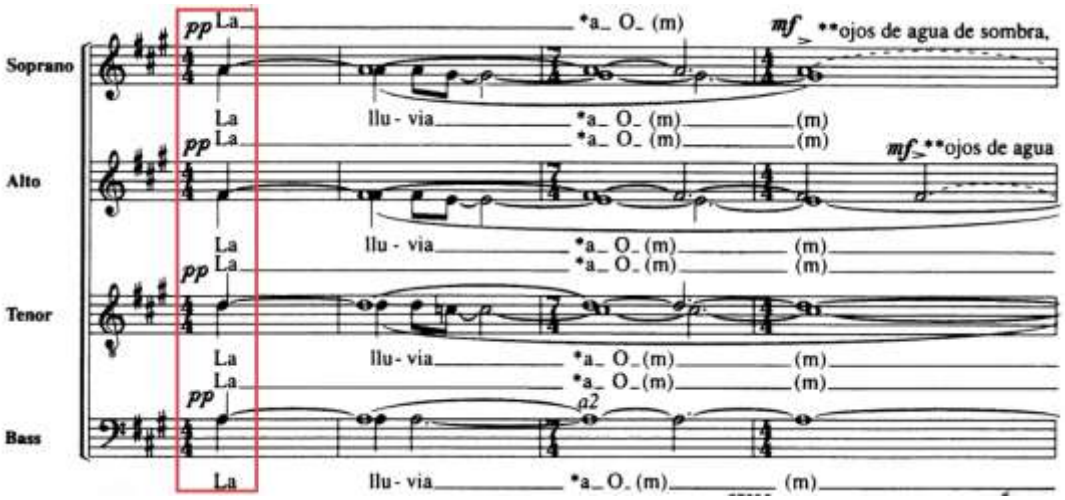

Figure 5: Eric Whitacre, *Cloudburst,* SATB score bars 1-4.

Source: Whitacre (1996)

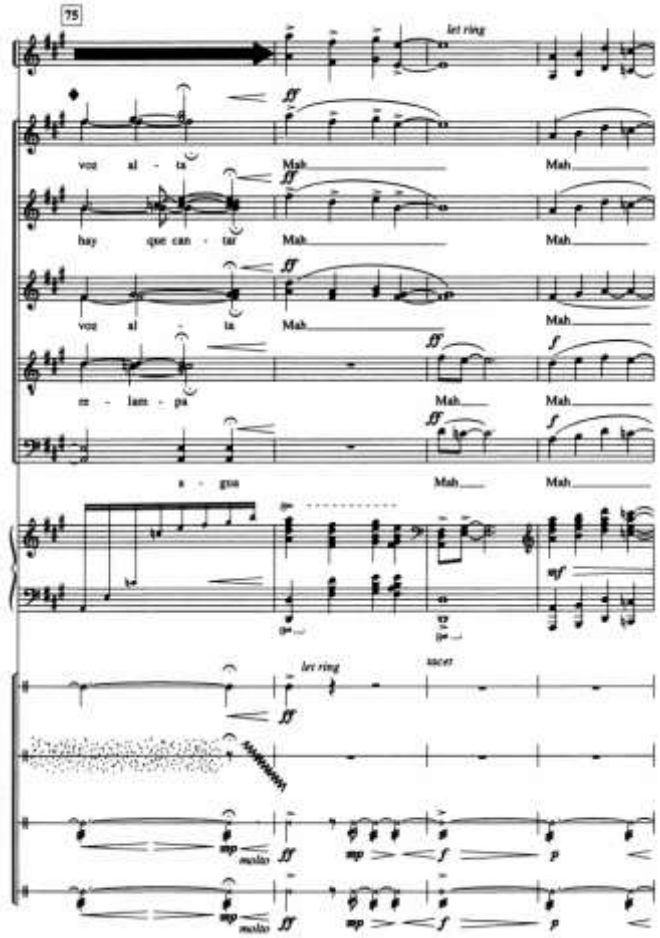

Figure 6: Eric Whitacre, *Cloudburst,* SATB score bars 75-78.

Source: Whitacre (1996).

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A further challenge concerns harmonic density and intonational stability. Whitacre's choral writing frequently employs closely spaced sonorities and extended tertian harmonies, which demand heightened sensitivity to pitch alignment and timbral balance. In bars 37–39 (Figure 7), the succession of harmonies—including Am, G, F♯m7♭5, C, and D7—within a 6/4 metric context significantly increases the cognitive and auditory load placed on singers. Conductors may address this complexity by adopting subdivided conducting patterns, such as a 3+3-beat framework (Figure 8), to clarify metric structure and support ensemble coordination. Rehearsal strategies, including sectional pitch reinforcement, layered harmonic construction, and focused listening exercises can further stabilise intonation while preserving harmonic richness

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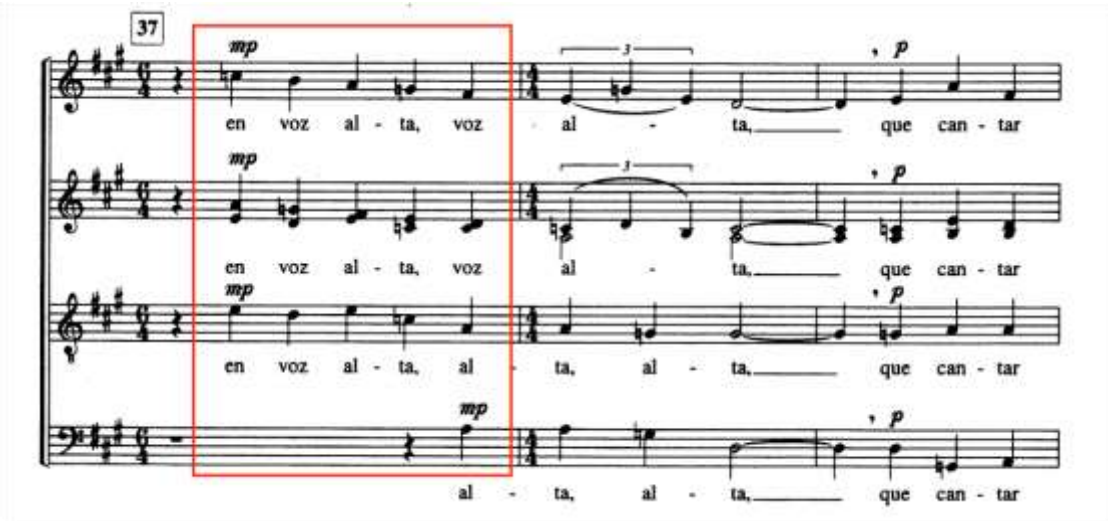

Figure 7: Eric Whitacre, *Cloudburst,* SATB Score, Bars 37-39.

Source: Whitacre (1996).

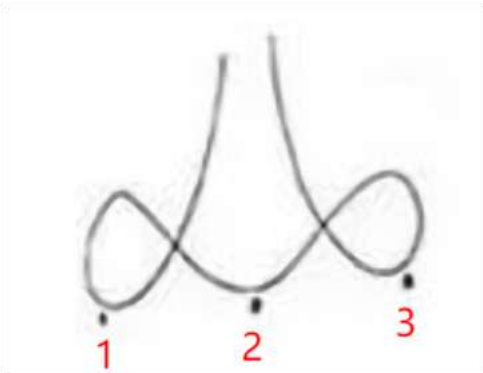

Figure 8: Three-Beat Conducting Pattern (3+3 Subdivision)

Source: Author's illustration

Beyond technical considerations, the creation of an expressive atmosphere presents an additional challenge. Cloudburst evokes natural imagery through gradual textural accumulation and subtle shifts in colour, requiring conductors to cultivate a shared emotional and imaginative framework within the ensemble. If gestural communication becomes overly rigid or mechanistic, the work's poetic delicacy risks being compromised. Effective conducting in this context therefore involves the use of metaphor, imagery, and embodied gesture to guide singers towards a flexible and responsive expressive state.

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The coordination of non-verbal sound actions—such as air sounds, finger snapping, clapping, and thigh tapping—further complicates the conductor's task. These actions must align precisely with sung material without disrupting overall acoustic balance. In passages involving dense rhythmic activity (Figure 9), conductors must clarify the function and intensity of each non-verbal element while maintaining ensemble cohesion. This often requires more explicit gestural differentiation and heightened physical presence to support rapid transitions between vocal and non-vocal modes of sound production.

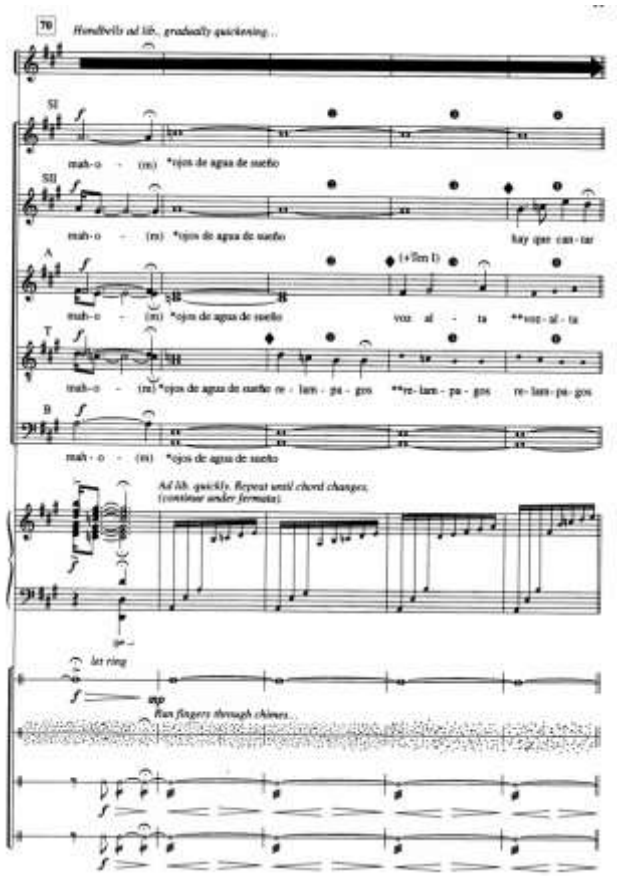

Figure 9: Eric Whitacre, *Cloudburst,* SATB score bars 70-74.

Source: Whitacre (1996).

Finally, timbral integration remains a persistent challenge throughout the work. The interdependence of closely voiced harmonies, air-based sounds, and soft vocal textures places significant demands on collective listening and balance. Conductors must therefore engage in continual adjustment of vocal weight and colour during rehearsal, encouraging singers to negotiate a delicate equilibrium between technical control and expressive openness.

Taken together, these challenges position *Cloudburst* as a work that tests not only the conductor's technical proficiency but also their capacity for embodied leadership and interpretative judgement. Navigating dynamic extremes, harmonic density, and non-verbal sound coordination requires a conducting approach that integrates precision, imagination, and responsiveness, underscoring the multifaceted role of the contemporary choral conductor.

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Conclusion

This study has examined *Cloudburst* as a paradigmatic example of how extra-vocal sound actions function not merely as surface effects but as structurally and expressively integrated components of contemporary choral writing. Through score-based analysis and reflection from a conducting analytical perspective, the article has demonstrated how air sounds, body percussion, and spatialised sound actions generate specific demands on conducting gesture, rehearsal strategy, and ensemble coordination.

From a conducting perspective, the findings highlight the necessity of approaching non-verbal sound not as an ancillary layer to vocal performance but as an embodied mode of musical communication. The conductor's role is thereby redefined as that of a mediator who integrates sonic, physical, and expressive dimensions through differentiated gesture, bodily presence, and interpretative judgement. Such an approach foregrounds conducting practice itself as a form of interpretative knowledge and situates conducting analysis within broader discussions of musical interpretation and performance practice.

While the discussion has focused on *Cloudburst*, the analytical framework and practical insights developed here may inform the interpretation of other choral works that employ non-pitched sound, body-based actions, and extended vocal techniques. Further research may explore how these principles operate across different ensemble contexts and repertoires, contributing to the ongoing re-evaluation of the conductor's role within expanded modes of choral performance.

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