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VOICE: FORENSICS & PERFORMANCE

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Claire, the protagonist in David Greig's play *The Events* (2013), has recently survived unimaginable tragedy.ⁱ As a liberal Christian priest, she has been running a multicultural choir, a project designed to welcome people in her country and help them integrate through vocal exchange and the resonantly affective immersion of choral singing. However, a fanatic young boy, obsessed with returning to an assumed state of ethnic purity within the national territory and advocating protection against the influx of foreigners, commits massacre, shooting down or injuring most members of the choir. Claire is the only one surviving this atrocity physically unaffected.

What was just described in this rather crude synopsis of *The Events* might present itself as a powerful yet straight-forward storyline. Audiences, however, are only able to synthesize and imaginatively reconstruct this version of the events that lie at the heart of the play by the end of the live performance.ⁱⁱ What spectators witness, as the performance unfolds, is a series of fragments detailing Claire's attempts to come to terms with the shootings, to engage in a life-affirming—or, at least, consolatory—process of meaning-making, and to reach some kind of closure. These attempts are mostly dialogic in form and involve Claire's female partner Catriona, a therapist she converses with, the Boy's father, a right wing extremist politician whose views seem to have influenced the Boy's actions, and a priest to whom

Claire confides her thoughts when seeking advice. At the very epicentre of these exchanges lies the question ‘What happened?’ as audiences try to piece together information and get a broader picture of the committed crime. Correspondingly, both in the dramatic fiction and the performative encounter between spectators and performers, a question that lingers is ‘Who is the perpetrator of the crime and why did he commit it?’

Given the fragmented nature of the text, this question becomes a key dramaturgical device, implicitly extending an invitation to audiences to collect and interpret data, to painstakingly unpack their forensic validity while delving deeper into the emotionally charged process of psychological recovery enacted, almost ritualistically at points, by Claire. Why was the crime committed? What is the profile of the shooter? How can the very process of such a ‘profiling’ drive the dramaturgy of the piece? Why is voicing—ranging from spoken interchanges and almost poetic monologues to choral singing and chanting—so central to the performance of *The Events*? What engagement between stage and auditorium does this expansive voicescape activate? What new knowledges can emerge if voice in this case is not examined monodisciplinarily as either authored text (linguistics) or composed sound (musicology and sound studies) but *interdisciplinarily* as performed text and experienced sound (performance studies) and, crucially, as identifying evidence (forensics)?

Taking cue from such questions—questions that mobilize a dynamic and proliferative intercrossing between performance studies and forensics—this chapter offers the first systematic investigation of voice in the piece. Such an analysis expands, and at points challenges, the rapidly growing body of critical work on *The Events*. The play has been primarily read as a compelling metaphor for contemporary politics. This reading has emerged from a line of enquiry mainly drawing on Greig’s approach to writing and well-known political concerns around globalization (Holdsworth 2013; Zaroulia 2013; Wallace 2015:

201-03) as well as on the historical events that loosely inspired the script, notably the mass killings conducted by Anders Breivik in Norway in 2011 (Gray 2013; Greig 2014a; Wallace 2016; Zaroulia 2016). This chapter returns to what might at first appear as a thoroughly examined moment in recent European theatre history to point in the direction of what has potentially been left unexamined or at least did not receive appropriate scholarly attention. This chapter's interests lie with *the role of voice* in such performance-instigated debates on contemporary politics. Consequently, what it attempts to do is to interweave a questioning of vocality in the piece with what I perceive as the underlying invitation to forensically unpack the perpetrator's character and motives.

Beyond its localized interest in the piece, this chapter primarily deals with broader questions around voice and suggests new possibilities for its critical interrogation outside purely representational modes of analysis. The first section details predominant understandings of voice in performance studies and forensics, and this parallel but also contrapuntal examination reveals definitions of voice as contested and context-specific. The second and third sections extrapolate the concepts of the 'expert listener' and 'earwitness reliability,' both developed within the emerging field of forensic speaker identification, to re-energize them as methodologies for a radically alternative experiencing of *The Events*—and voice in performance more generally. It is for this reason that what needs to be outlined from the outset is that the core concern here is a methodological one. This chapter does not merely extend an anti-visuocentric critique to the deaf ear performance studies scholarship often lends to the critical understanding of theatre practices.ⁱⁱⁱ Nor does it only aim to provide a musicology-inspired analysis of vocal utterance in the piece to open up broader discussions around how voice can be understood and, significantly, experienced in performance. Crucially, this chapter is the very first endeavour to activate an interdisciplinary encounter between performance and forensics in search of a new methodology for listening-in to

performance and, through this, for rethinking conceptualizations of voice in the very act of practising vocal listening. How can we then rethink what voice is and what voice does in performance, and which are the particular benefits of drawing on forensics for this purpose?

Invoking voice in performance and forensics: working through interdisciplinarity

Literature on performance and forensics is meagre, with only one monograph currently in the making (Frieze, forthcoming). When honing in more specifically on the question of voice in a terrain jointly occupied by performance studies and forensic analysis, academic writing is virtually non-existent. As a first step towards filling this critical lacuna, this chapter is not primarily designed to offer an overview of the intersections between the two disciplines or summarize relevant discussions. Rather, the tactic deployed here is one of strategic localization; the performance of *The Events* is used as a productive case study out of which questions can emerge about the integration of, or incongruities between, disciplinary epistemic and methodological panoplies. The hope is that the answers provided within the context of this particular play will make audible aspects of its performance in ways that would not have been possible, or at least equally resonant, in/through monodisciplinary discursive practices.

There is currently no substantial historical overview of the rise of voice as evidence or, broadly speaking, as an area of interest and deliberation within forensics. However, an oft-cited pivotal moment is the trial of Bruno Hauptmann in 1935 (Karpf 2007: 256-57; Kennedy 1985; Kreiman & Sidtis 237-39; Solan & Tiersma 2003: 373-78). In 1932, Charles Lindbergh's child was kidnapped and, later, Lindbergh identified in his testimony Hauptmann's voice as that of the kidnapper despite the fact that more than two years had passed since the ransom exchange event during which he overheard the kidnapper and that Lindbergh had only heard the voice of the ransom collector/perpetrator once, from

considerable distance. Although other supporting evidence was also procured, Lindbergh's aural identification was central to Hauptmann's conviction and execution in 1936. A similarly evocative case in the literature is the voice identification of Adolf Hitler after an assassination attempt in 1944 (Karpf 2007: 257; Hollien 2002: 20-21). The Allies were eager to verify whether the person still making public speeches was Hitler himself or a double, and the laboratory set up at Purdue University in Indiana, despite the poor quality of some of the available recorded samples, was able to reach the convincing conclusion that Hitler was still alive—and voicing. The 1960s was a period during which voice identification received wider attention due to the development of 'voiceprint' technologies, which purported to visualize the unique vocal imprint of speaking subjects. Coulthard (1999) further locates the birth of the forensic linguistics discipline in 1968 with the publication of Jang Svartvik's *The Evans Statements: A Case for Forensic Linguistics*, which through the analysis of grammatical inconsistencies in transcribed testimony, evidenced interference with the original spoken text of the accused, potentially by officers that processed the document. As manifested in the frequent appearance of relevant publications in the period, more experts began to testify at court during the 1990s and this led to the foundation of the International Association of Forensic Linguistics in 1993 and the publication of its attached journal *Forensic Linguistics: The International Journal of Speech, Language, and the Law* in 1994.^{iv}

Currently, expert voice recognition is accepted in American courts if subjected to a process of cross-examination (Solan and Tiersma 2003), even though this type of testimony is still not admissible in some states and its admissibility by and large depends on the case. In the UK, voice verification and identification can be admitted if supported by expert testimony (Karpf 2007: 259, 364). Such reliance on what Hollien (1990) has described as 'the acoustics of crime' is particularly significant in a range of cases, from bomb or other threatening calls to crimes committed by non-visually-identifiable criminals (masked offenders, crimes

perpetrated in the dark or in another location to that of the witness). Specialists in forensic phonetics might be asked to recognize significant features of a voice, for example accent or regional dialect, or provide expert opinion on whether voice recording technology has been interfered with when audio samples are submitted as evidence (Coulthard 1999: 108). More frequently, however, either the listener expert or the earwitness ‘may be presented with a single voice and asked to state whether it is or is not that of the perpetrator’ or ‘may hear a set of speakers in a voice lineup and be asked to identify one of them as the perpetrator of the crime’ (Kreiman & Sidtis 2013: 237).

Before elaborating further on the application of a forensically inclined listening/earwitnessing of the piece, it is useful to establish why voice is treated here as the problematic word setting this interdisciplinary endeavour in motion. In the realm of theatrical performance, and the broader research paradigm of performance studies, what one might mean when referring to voice might seem obvious. However, the paucity of working definitions of voice in this particular area is remarkable. None of the foundational texts of performance studies deals directly with voice: in the *Dictionary of Theatre Anthropology*, Eugenio Barba and Nicola Savarese (2006) do not offer any elucidation or attempt at a definition, neither does Richard Schechner (2006) engage with voice or vocal practices in his *Performance Studies*.^v If what voice is can be that elusive (or taken for granted), could we at least approach this subject through existing methodologies of analyzing it? Once again, there are no publications explicitly dedicated to this area of enquiry but some insights can be drawn from key texts on performance analysis. Erica Fischer-Lichte’s classical theatre semiology, for instance, is ‘only interested in the communicative function of language and the voice, for “the actor’s voice always functions as a sign,” and “as the sign of particular corporeal and/or psychological attributes of the character”’ (Pavis 2003: 137). In other words, semiotic analysis of performance interrogates voice as one of the signs that if/when placed alongside

other signs, can generate specific meanings in the context of particular productions. Voice is effectively textualized and proposed as another ‘custodian of meaning,’ understood within a differential field of signs and conceivably removed from the event-ness of performance (Bryon 2014: 40). Pavis criticizes this approach to voice by stressing its bodily contours: voice is material, generates physical affects, and is always connected to a body sounding forth. However, his analysis, largely inspired by Barthes, is also subsumed in the semiotic. His model is predicated upon voice as a one-directional vector from stage (actor) to auditorium, and the analytical tools proposed have the sole function of dissecting the performer’s mode of delivery (breathing, melody, intensity, structural patterning of words and phrases) (Pavis 2003: 131-40). This approach is even more explicit in Pavis’s *Dictionary of the Theatre*: here, for example, the thematic index at the forefront of the alphabetic entries lists voice as a lexical item under the headings of ‘Staging’ and ‘Actor and Character’ but not under ‘Reception’ (1998: xiv-xvii).

The situation is equally complex within the remit of forensics. Voice as an object of study can equally pertain to what Coulthard (1999) calls forensic application of linguistic analysis, Baldwin and French (1990) understand as forensic phonetics, Rose (2002) treats as forensic speaker identification, while Hollien (2002) and Primeau (2014) promote as forensic voice identification. This apparent terminological multiplicity is partly due to the origination of this developing field within linguistics (and phonetics, in particular). What is of interest here, however, is to extricate the underlying assumptions supporting much of the discourse around voice in these discussions. Voice is that which simultaneously exceeds and encompasses text. Rose proposes a model of forensic analysis that integrates an understanding of phonemics, speech acoustics and speech perception with a distinguishable but overlapping concern about voice quality (2002: 175-302). In this respect, there is an affinity with Pavis’s approach to analytically disentangling the communication of the

linguistic message from the prosodic, affective, and lived components of vocality. This affinity extends to the fundamental presupposition that voice unmistakably speaks of identity. If in both Fischer-Lichte's and Pavis's propositions voice is (either solely or additionally) a symbol of selfhood/characterization, the core concern in forensics lies with using the acoustic phenomenon of voice as the means through which to determine someone's identity; in Karpf's words: 'the belief that the individual's voice is as distinctive as their fingerprint has become so unshakeable that voice verification has been welcomed by both commerce and government, offering the promise of security in transactions and surveillance' (2007: 254).

Approaches to voice between the two disciplines, however, also diverge. In forensics, the task of attaching a voice to a person is not simple or straightforward. Depending on the type of criminal investigation, a forensic specialist might be required to participate in several processes of *speech recognition* (reconstruction and/or transcription of inaudible speech clues through phonetic indicators) (Coulthard 1999; Primeau 2014) or *speaker recognition* (Baldwin & French 1990: 107-11; Rose 2002: 81-92). Speaker recognition itself can also refer to two distinct processes: *speaker identification* (attempt to identify an unknown speaker comparing a sample of that unknown voice to several vocal samples from known speakers) or *speaker verification* (confirming or rejecting claims to identity from an unknown voicer against a set of samples including a known sample from the person whose identity he/she claims). Furthermore, voices in a forensic context can receive such treatment as investigation through aural-perceptual analysis, phonetic inspection and critical listening, or via aural spectrographic analysis and voice biometric processing through identification software.^{vi} Definitions of voice depend on *practices* of voice identification, the overarching *purposes* of such processes and the very *medium* through which such processes are realized. Forensic approaches to voice, although situating voice within the matrix of identity, are at the same time self-consciously critical of such approaches to assigning voice to self and, as will

be shown in the final section, do not only deal with the voicer but place equal emphasis on voice as an ‘in-between’ (Thomaidis and Macpherson 2015: 3-6), irrevocably implicating the perceiver.

Why is it, then, important to work interdisciplinarily between performance studies and forensics? On the one hand, the law and juridical language have been fundamental in shaping Austin’s understanding of the locutionary functions of utterances, leading to his understanding of the performative, which was, in turn, crucial to the development of performance studies (1975: 43, 65, 88, 153-55). Trials also play a central part in Schechner’s proposition of the broad spectrum of performance (2003: 211-14, 250-51, 260-61). At the other end of the interdisciplinary encounter, and given the evolving nature of the methodological instruments employed by voice identification experts as well as the discipline’s current reliance on tools that were developed either within linguistics or for the purposes of audio-visual recording and sound processing, it is not surprising that voice identification practitioners recognize their vocation as both an art and a science (Baldwin & French 1990: 1; Primeau 2014: xi). Coulthard pushes the comparison between voice in theatre and voice as evidence further:

[A]ll utterances are shaped for a specific addressee on the basis of the speaker’s assumptions about shared knowledge and opinions, and in the light of what has already been said earlier [...] It is for this reason that truly ‘authentic’ conversation would be impossible between actors on the stage: the real addressee of any stage utterance is in fact the audience. [...] Characters [...] break the quantity maxim and say to each other things they already ‘know’ [...], in order to transmit economically essential information to the audience. [...] When we come to consider the fabricator of forensic texts, we can see that he is in a situation directly analogous to that of the dramatist – he is creating his

text with the overhearer, in this case the judge and jury in Court, in mind and is anxious to make incriminating information as unambiguous as possible.

(1999: 112-13)

Karpf summarizes the permeation of the theatrical as a constitutive mythology in the working practices of forensic voice identification: 'voice identification is a romantic idea [...] and a *dramatic* one: it seems to accord with some theatrical fantasy of the unmasking of the criminal--betrayed by their voice' (2007: 258; added emphasis). Voices are not inherently theatrical, but their theatricalization serves a requisite purpose in collecting auditory and acoustic evidence within the crime scene, in the same way that a legally inflected examination of speech acts allowed Austin to define performativity.

These shared but also divergent lineages, alongside the overlaps and marked differences between the treatment of voice in performance and forensics, rather than posing an insurmountable obstacle to such interdisciplinary encounters, are particularly useful in exposing voice *per se* as a productive problem. If definitions of voice and practices of vocal understanding vary between disciplines, then the question is not which overarching methodology could apply *across* disciplines but which methodology is necessitated in the act of engaging with voice *inter*-disciplinarily. Which methodology emerges then when a performance where voice is central *and* used to build evidence is experienced through forensically informed listening?

Activating an interdisciplinary methodology: listening for vocal clues as evidence

Forensic voice identification methodologies are still in development (Coulthard 1999: 122) and very much contested (Edmond, Martire & San Roque 2011), or at least undergoing rigorous cross-examination that favours a more synergetic approach to investigative

processes (Elaad 1999: 223). Unlike other methods of forensic identification, such as fingerprints, ‘voiceprints in the end always come down to opinion, even if expert. [...] there’s inevitably an interpretive element to voice identification’ (Karpf 2007: 258). One of the key debates about the formulation of appropriate voice-based evidence revolves around the notion of *expert testimony*, which is now admissible in specific circumstances, as outlined earlier. Expert forensic listening is largely based on training and experience, typically involves a combination of auditory (aural-perceptual) and acoustic (technologically mediated) processes, and its results are submitted as percentages of the *probability* that a voice exemplar matches the incriminating voice sample. Such likelihood ratios express ‘the probability of the evidence given the competing defence and prosecution hypotheses’ (Rose 2002: 66; see also 57-62). This does not imply that this type of expertise cannot reach convincing conclusions; phonetic linguists have in tests performed better—albeit not always significantly—than everyday listeners in set tasks (Elaad *et al.* 1998; Schiller and Köster 1998; Shirt 1983).

Kreiman and Sidtis suggest, nevertheless, that, alongside offering opinions on voice identification of specific samples, ‘expert testimony can be of great value in informing juries about the limitations of this kind of evidence’ (2013: 259). In provoking official dialogue around earwitness testimony, voice identification processes are not only to be treated as a means of arriving at a (condemning or acquitting) verdict—they can also actively contribute to knowledge production about the current state of affairs in audio-based forensics and facilitate the development of appropriate epistemologies in the very act of applying them. In other words, the voice identification expert undertakes the double task of utilizing current tools and expertise while exposing their disadvantages and imperfections. In this light, the interdisciplinary methodology proposed in this chapter is not conceived as the *performance*

of a pre-existing model, neither does it originate with a ‘*performer*’/researcher prescriptively defined within/by the discrete disciplines of performance or forensics.

When I attended *The Events* in Brighton in 2014, the piece had already been on tour for months and I had read the published script, several reviews and articles as well as the composer’s notes. Given that these knowledges formed an active part of my engagement with the performance, and in line with the broader interdisciplinary concerns of this edited collection, here I do not propose a *reading* of the vocal *signs* in the piece; rather, I observe the activation of my interdisciplinary interest in forensics and performance, prompted by voice-related questions and nascent findings that formed my *experience* as an audience member particularly attuned to the specifics of vocal practices. The remainder of this section, acknowledging and foregrounding my positioning as a voice practitioner-scholar, offers a forensics-inspired ‘expert listening’ of the vocal clues in the performed play. This methodological experiment is a nascent ‘field of doing’ (Bryon 2014: 61), an emerging process facilitating the practice of a transdisciplinary concern with vocality. To build on Experience Bryon’s (2014: 61) terms, it is practised as an ‘active aesthetic’ and proposes that the doing of a voice practitioner may not exclusively be the aesthetic performance of voicing but also *the act of generating vocal knowledge in the process of listening to voice* as a trained voicer/expert.

The performance of *The Events* offers a rich sonic field, ripe with utterances traversing the full speech-song continuum—voicings that, given the piece’s preoccupation with dissecting a criminal act, could be treated as vocal evidence.^{vii} In an early scene between Claire and her therapist, Claire is emphatically attempting to solidify the Boy’s attributes as a criminal. The therapist, however, refuses to reduce the Boy’s identity, and therefore the logic of his deeds, to a single unifying definition. When confronted with Claire’s insistence, he

resorts to admitting: ‘to understand him properly, we would need to interview him. To explore his family background. Without that all we have is speculation’ (Greig 2013: 26). Dramaturgically, this palimpsest of character-defining perspectives and the simultaneous attempt to give the perpetrator a voice of his own are embodied by the choice (written in the text and embraced in all UK stagings) to have all characters other than Claire performed by one young male actor listed in the *dramatis personae* as ‘The Boy.’ This choice could be read in various ways: the Boy is a figment of Claire’s imagination acting as a sounding board for her thoughts and proliferating question marks. Or, Claire’s life has been haunted by the event to such an extent that every encounter with other people is essentially an encounter with the perpetrator.

Which are, however, the clues in the Boy’s vocal persona, as resounding in the performance space? In the original production, director Ramin Gray cast as the Boy Rudi Dharmalingam, a British actor of Indian origin, while Clifford Samuel, a Black-British actor of Nigerian origin, performed the part in the tour. Visually, this is an interesting subversion of the perpetrator’s profile; someone who vehemently despises multiculturalism is embodied as the Other. What a sole emphasis on the visual bypasses, however, is the sonic profiling of the character. In the original production and the radio broadcast, Claire was played by Neve McIntosh, a Scottish actress speaking in her natural accent.^{viii} In stark contrast, the Boy used received pronunciation, a standardized version of Southern English speech. The succession of encounters between (‘accented’) Claire and all other (‘non-accented’) characters resembles a lineup of suspects; who is to blame? Psychology? Politics? Family? If treated as a *vocal* lineup (Nolan 1983 and 1997; Kreiman & Sidtis 2013: 257), however, earwitnessing becomes almost impossible. All ‘suspects’ or ‘accomplishes’ bear the same voice, despite linguistic variability. The Boy has the most extensive linguistic repertoire in that his idiolect (personal, idiosyncratic use of language) and register (the purpose for which language is

used) are adaptable and inconsistent when voicing all other personae, almost in the way a ventriloquist would. At the same time, all characters share the same fundamental frequency, tone, inflection and prosodic qualities with the Boy. In his performance, the actor never engages in vocal disguise; to the contrary, rather than aiming for vocal plasticity, the acoustic field is dominated by an extreme case of vocal subsumption, with all voices sounding disturbingly similar to that of the perpetrator. The question of familiarity and unfamiliarity is central to its forensic treatment because it is markedly influential in the way a voice is remembered or perceived as a threat (Kreiman & Sidtis 2013: 241). In this logic, the Boy's and Claire's accents can be heard as articulatory cues challenging any comfortable audience positioning, depending on whom audiences perceive as sounding 'non-familiar.' It is not insignificant that a play written by a Scottish playwright that opened at a Scottish festival in the year leading up to the Scottish referendum uses voice to ask 'Who is the (aurally defined) foreigner?'—and, implicitly, 'Who is perceived as a threat?'

Adding to the play's plural vocality, and further complicating the process of forensic speaker recognition (*Who is the person emitting the voice?*), is Greig's central dramaturgical device. Apart from Claire and the Boy, the play involves a choir. This could be seen as the actual choir rehearsing with Claire either before or after the shooting. An obvious association here is with practices of classical Greek drama (Greig 2014b) and, specifically, the use of the chorus as representing, challenging and interrogating notions of community or highlighting the fact that the characters' individual actions are at the same time a public act. Once again, and while being very relevant, such analyses of the choir emphasize the visual, effectively addressing it as a plurality of bodies accompanying the main characters and alluding to a real or phantomic, communal 'us.'

What does the experience and *vocal* examination of the singers' concrete presence and functionality reveal? Are their voices to be subsumed, as in other analyses, into one unified or unspecific vocal practice, that of communal/choral singing? Are they simply supportive or secondary to the two actors' voices? Are their voices to be edited out as unwanted 'noise floor' (Primeau 2014: 13) or 'distracter voices' (Kreiman & Sidtis 2013: 257) in the process of voice identification? A critical listening to/of the choir's vocal interventions might be useful. At the opening of the performance, the first song we, as audiences, get to hear is a Norwegian Coffee Song, sung by Claire's choir. The lyrics can be loosely translated as 'Gather, roast, grind, boil the coffee / And we fetch it and we roast it / -One more cup? -Yes, thanks' (Sea Green Singers 2013). According to the composer's notes to the choristers, the reason why the pitch rises and the tempo goes faster every time the song is repeated is to produce 'a bit of lightness and joy' (Browne 2013: 7). Two relevant observations can be made here; in the penultimate scene of the play, when Claire visits the Boy in prison, the person who longs for a hot drink is the Boy. Secondly, Browne notes: 'the song gets faster each time. [...] The last time should be so fast that it's almost impossible to get the words out' (2013: 7). In other words, the song is not only designed to create an atmosphere of exultation and joy, but also to induce a state of physical exhaustion within the choir, or at least, demand from it a higher level of physical awareness and/or exertion from the voicing physiology. The next time the Boy performs (as) himself, he is also in a highly athletic setup, jumping rope and spitting out fast-paced responses to quasi-journalistic questions.

The second choral intervention is a highly evocative one, almost reminiscent of the luscious harmonies that act as soundtrack to emotionally charged scenes in films or musical theatre. The only word that is uttered is 'soul' and the intended atmosphere is 'subtle' and 'magical/ethereal' (Browne 2013: 8). Claire in this scene is confessing her anxiety about resorting to terms—like 'soul'—that might be interpreted as spiritual. The choir comes in

when she recalls the moment the Boy, in his shooting spree, burst open the locked door of the room in which she was hiding and entered (Greig 2013: 15). The vocalized underscore, however, does not duplicate Claire's thoughts on spirituality; rather, it fades in the same moment in the performance when the Boy enters her memory.

Throughout the performed dialogue, there are implicit pointers that the Boy, as a theatre persona, is a sonic one. In the exercise scene, the first question he responds to is whether he has a favourite song. His answer is “‘Bonkers’ by Dizzee Rascal!” (Greig 2013: 18), an electro/hip house track produced by a Black-British rapper that further complicates the Boy's stage ‘self.’ A scene later, the Boy listens loudly to ‘Bonkers’ through his earpieces (Greig 2013: 23), and the first impression he makes on Claire when he announces that he is about to kill any foreigner in her choir is that of the ‘the tss-tss-tss of music bleeding from his headphones’ (Greig 2013: 49). When the choir sings for the third time, they perform a choral arrangement of ‘Bonkers.’ The lyrics that would be the most obvious choice to extrapolate are the refrain: ‘Some people think I’m bonkers / but I just think I’m free’.^{ix} However, what the composer incorporated in his arrangement and asked the choristers to sing is the first stanza, which gives the impression of asking the listener to question what is superficially there: ‘ev’ry thing in my life ain’t what it seems / [...] I act real shallow but I’m in too deep’ (Sea Green Singers 2013). It is as if the chorus distances itself from distancing. They are not making an external comment on the Boy's mental state; instead, they are inviting the audience to share an insider's perspective beyond appearances.

After Claire's encounter with the Boy's father and one of his friends, she is seen rehearsing with her choir once again. The song this time is ‘How Great Thou Art.’ This choice is particularly resonant on a number of levels. On the one hand, it is a popular Christian hymn, particularly in the Anglo-Saxon world; it was voted first in popularity in the

UK in BBC's Songs of Praise religious programme (BBC 2013). On the other hand, the song extends and interrogates the logic of vocal conflation of geographies, established through the playful use of the characters' UK regional accents against a backdrop of a storyline inspired by event set in Norway. Similarly, the hymn originated in Sweden and found its widely circulated contemporary form through translations into German, Russian and then English. The lyrics are ones of praise to Christian God's omnipotence and one of wholehearted devotion. It is intriguing, however, to listen in more carefully to how the song is dramaturgically deployed in performance. The choir starts singing the first stanza, but Claire, audibly upset, interrupts them and instructs that they 'try humming it this time' (BBC 2014).^x After a full round of murmuring, the refrain, with its twice repeated words 'then sings my soul, my saviour God, to thee / how great thou art, how great thou art,' is performed.

The lyric at which Claire interrupts the choir, effectively muting any linguistic content through the act of replacing the lyrics with humming, is: 'I see the stars, I hear the rolling thunder.' This is yet another piece of vocal evidence in the search of the perpetrator's identity. In the scene during which the Boy shares his worldview and ideological affiliations in an interview-like format, the Boy establishes links between his preparations—his 'warrior' practice—and 'Viking warrior shamen' (Greig 2013: 16) who would spend time in the woods invoking their spirit animal in preparation of going down the mountain towards the village to unleash their killing rage upon their enemy's people. Significantly, the moment when the trainee warrior becomes a killer is rendered as follows: 'he would march down the mountain like *the coming of thunder*' (Greig 2013: 17; added emphasis). Even though the choir attempts to draw consolation and moral support by making God the addressee of the song, the sonic space defined by the metaphor of the thunder is not one of justice and solace, but a vociferous reminder of mass murder. It is not surprising, then, that when, in a later scene, Claire attempts to teach and conduct a shamanic ritual song, a call-and-response melody

accompanied by drumming and stomping, the hoped-for cleansing effect is far from achieved. Claire collapses, while choir participants find the song upsetting and express their resistance to return to rehearsals. Claire's voiced intention was 'to bring back our [the choristers'] souls' (Greig 2013: 40), but Greig offers a much bleaker version of what was actually invoked; when the choir breaks, the stage directions, rather enigmatically, read: 'A short nature documentary about foxes' (Greig 2013: 43). There is particularly resonant haunting taking place in this moment as, listening back to the interview/exercise scene, the Boy, when asked if he has a spirit familiar, declares unequivocally: 'my spirit familiar is a fox' (Greig 2013: 19).

The penultimate choral song is, in the composer's words, 'a display of rampant ego and as such should be a big sound with big attitude. [...] The style here is gospel meets stadium rock' (Browne 2013: 9). The ego-perspective amplified in the song is resolutely that of the Boy, as the song is a sung rendition of one of his earlier statements: 'By the time he was my age Jesus had founded a world religion. By the time he was my age Bob Geldof had saved Africa. By the time he was my age Gavrilo Princip had fired the shot that started WWI. If I'm going to make a mark on the world I have to do it now' (Greig 2013: 17-18).^{xi} The rhythm is upbeat and the tune almost infectiously participatory, to the extent that the sonorous affect might overshadow where the lyric content originated from. More importantly, when piecing together the Boy's identity, this song serves the performative purpose of revealing this presumably singular perpetrator as a multiplicity, as a living lineage of people and practices, as a chorus of singled out historical precedents.

After reaching some sort of resolution, Claire returns to the rehearsal room hoping that her choir will be there, that despite her previous emotional outbursts and unwillingness to forget, new members will sign up. The final song is one of the most complex vocal

statements in the piece. The composer aimed to expose ‘the internal conflict we humans have between being together and being separate. This song completes the story with a simple statement about togetherness’ (Browne 2013: 9). The lyrical content, accompanied by simple harmonization that edges more, but not clearly, to a major scale, refers to inclusivity and presence; foreigners, ex-offenders, addicts form its linguistic world and the line that is reprised in the end is: ‘We’re all in here.’ Whereas the Boy sits silent, Claire addresses the audience as if they are potential choristers, gently encouraging them to join in if they feel like it. Clare Wallace rightly observes the multiplicity of questions such a moment raises for our sense of community within the microcosm of the performance venue: ‘What does this moment of singing together, in which audiences might participate, signal? The resumption of conformity? A declaration of faith in community perforated, but not destroyed, by the absence of those murdered? An aesthetic questioning of the boundaries consensus defends?’ (2016: 38). Although in the performance I attended the audience did not respond to the call to sing, this sense of an invitation to participate vocally, to recognize the affinities between the audience and the choir, was palpable as the choir got progressively closer to the audience and the singing more committed and affirmative. In the next section I will engage with Wallace’s invitation to rethink community. However, I will offer a *different listening* of the piece, a way of practising sensorial attentiveness within the aural field of performance without solely placing the focus on the aural cue/emission but also acknowledging the constitutive entanglement of the listener (and in this case, the presupposed listening ‘community’) in the process. This different listening will be informed by examinations of reliability within speaker identification methodologies and, in this case, will be instigated by a return to the core forensic question activated by Greig’s performed dramaturgy: ‘Who was the perpetrator?’

Listeners’ reliability: unpronounced communities

During the play's run, both in London and on tour, local choirs were employed to perform the choristers, all in all involving 78 choirs across the UK.^{xii} This fact resonates with Wallace's intriguing questions around community, but further observations gathered through personal ethnography can also be of use here. In the performance I attended in Brighton in 2014, I overheard several discussions in the auditorium, centering on the fact that spectators' friends, relatives or neighbours participating in the local choir were involved in the piece—and, as one might expect, such comments were interspersed with the odd giggling and pointing when these people were on stage. This observation, if considered alongside the pragmatic logistics of big choral ensembles inviting friends and relatives or even offering comps, reinforces the sense of an affective community between choristers and audiences. These are not actors representing a community and reflecting it back onto itself. These are amateur singers who are *parts* of this community and are recognized as such—at least by a percentage of spectators.

How does this, however, relate to the forensic process of collecting vocal data about the perpetrator? If audiences are conceived in this discussion—at least partly—as earwitnesses, another methodological concern borrowed from forensics should be introduced, namely that of earwitness reliability. Forensic voice identification is not only concerned with the attributes of the voice *as emitted signal* but primarily with its *reception*. 'Speakers can differ in many ways [...] but the factors that underlie most differences between speakers (age, sex, race, physical size, etc.) are not in general the focus of forensically oriented studies, which instead emphasize factors that are likely to interfere with recognizing the voice' (Kreiman & Sidtis 2013: 240). In court, both the voice identification expert and any earwitnesses are called to question themselves as listeners; how successful are they in distinguishing between voices? How accurately can they recollect the qualities of voice and for how long?

If, in performance studies, the analysis of voice as sign is predicated on the postulation of a credible auditor, forensic voice identification literature decisively de-naturalizes such an assumption by examining a wide array of factors that may impact on earwitness reliability. Such factors include: the listener's inherent ability to remember and recognize voices; the degree of attention and amount of exposure to the voice during the crime (number of opportunities to listen to a voice, ability to both listen to a voice and see the face of the perpetrator); and the witness's confidence in identifying a particular voice; relevant training and ability (sustained practice and professional experience, ability to extract the salient features of a voice and retain it in one's memory for longer, familiarity with particular accents, languages or idiolects) (Kreiman & Sidtis 2013: 250-56; Solan & Tiersma 2003: 393-412). In addition, courts may accept or disregard earwitness or voice expert testimony on the basis of established criteria of admissibility, known as 'Biggers criteria' (Kreiman & Sidtis 2013: 239; Solan & Tiersma 2003: 378-93). These include: for how long and in what conditions the witness was exposed to the voice when the crime was committed, the degree of attention to the voice, how accurately the criminal was described by the witness when the crime occurred, how certain about the identification they were, and the temporal distance between the occurrence of the crime and the identification. The technology employed to record or transmit the voice, as well as the testing methodology applied to voice identification, are also subject to scrutiny.

Voice, examined in this way, is revealed as a process rather than as a (complete, identifiable, locatable) sign in the chain of signification. Taking interdisciplinary cue from this sense of distrust towards *voice-as-perceived*, or at least the necessity to establish the credibility of the listener, it is time to synthesize findings and propose a radical listening of the voicescape in *The Events*, one with resounding implications for discussions of community. Visually and in terms of spatial configuration, throughout the play there are two

identifiable characters—Claire (the victim) and the Boy (encompassing all other accomplices and versions of culpability)—and the choir, appearing as an iteration of an emphatically affective ‘us.’ However, the ‘expert listening’ proposed in the previous section, supported by a questioning of the perceiver, destabilizes visions of the utopian, hopeful, or inclusive communal. The choir sings the Boy’s favourite song and renders one of his texts in singing. It opens the performance with a song alluding to the country of origin of Breivik, the mass killer who triggered the creation of the play. The choir is there when the Boy’s spirit animal is invoked, and its harmonies enter the sonic field when Claire recalls the Boy. When Claire says ‘I have to see him. Face to face’ (Greig 2013; 48), the choir enters singing, and immediately after the song, Claire admits: ‘I see a boy’ (Greig 2013: 49). Isn’t it possible then that all vocal clues suggest that the choir *is* the Boy? And if ‘we,’ as audiences are invited to affectively connect with the choristers as community, is it not possible that ‘we’ are not just listening witnesses, but equally implicated in the crime? Might Greig’s orchestration of the vocal indicate, then, that the Boy is not an exception or an outsider but an integral or constitutive part of ‘us’?

If the piece is sonically rich and requires rigorous, if not expert, listening-in; if the Boy and the choir have the most extensive vocal repertoires within the sonic phenomenology of the performance; if the choir not only represents the local community, but vocally stands in for it and affectively invites it to participate; and if the vocal choices of the choir reveal it to also *be* the Boy; then, a sustained forensic listening to the piece provides a complex and unsettling answer to the question of where blame lies. This answer might interrupt the logic of community forging, enhanced by the bodily intimacy between performers and audiences in the finale or the semiotic distancing between the murderer, the choir of ‘victims’ and the bystanding witnesses/spectators as discrete ‘signs’ in the performance space. ‘We,’ as *spectators*, are not a community uncomplicatedly united in the aftermath of atrocity; ‘we,’ as

audiences, unite in the face of adversity that we (may have) brought upon ourselves. As if, in the processes of forensically unpacking performed vocal evidence, our subject position hauntingly shifted from that of the earwitness to the revelation that ‘we’ might be the perpetrator—or in some measure, his unknowing accomplices.

This is in many ways an unresolved, or uncomfortable, experiencing of the performance. When listening to voices as evidence and when questioning our own reliability as listeners in this process, we, as audiences, might find ourselves equally participating in the circulation of affect that bonds us as a temporary community *and* distrusting the assumptions on the basis of which such a community is fabricated. The Boy is not an easily delineated voicing self; his songs, music, lyrics and rhythms are also taken up and sounded forth by the Choir. Similarly, my perception of ‘his’ voice required a dialogue between listening as an expert and a questioning of my participation in a community of listeners who are potentially unreliable or, at least, accountable for constructing what we listened to. In this chapter, the interdisciplinary examination of performed voices through an unconventionally activated forensic methodology revealed both the voicing persona and the perceived voice as being actively in the making. On this basis, and to propose a conceptual move of wider applicability, can such interdisciplinary undertakings be extended to shift attention away from *voice* as stable and predefined—in other words as sign or essence—to *voicing* as unruly and processual—in other words, as practice and experience?

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ⁱ *The Events* opened at the Traverse theatre, Edinburgh, in August 2013, transferred to the Young Vic, London, for a sold-out season, and subsequently toured extensively in the UK and abroad. For further information, see Actors Touring Company (2015).

ⁱⁱ This analysis is based on my attendance of the play (Brighton Dome, May 2014) and multiple listenings of its radio version (BBC 2014), in cross-examination with the published script (Greig 2013). The composer's scores and notes were accessed online (Sea Green Singers 2013).

ⁱⁱⁱ Adriana Cavarero (2005) developed a sustained philosophical critique of logocentrism and its subsequent muting of the uniquely embodied voice. For an extension of this line of thinking towards vocal performance studies, see Thomaidis (2015). In this chapter, the

primacy of semiotic analysis in theatre studies, of understanding performance as a chain of signifiers, is treated as a direct outcome of logocentrism.

^{iv} For information on the association, see IAFL 2016. The journal can be accessed here:

<https://journals.equinoxpub.com/index.php/IJSL>.

^v For a broader critique of Schechnerian-inflected performance and performance studies, from the perspective of their relation to analytical models premised on representation, see Bryon 2014 (39-40, 49-50). Bryon proposes a movement away from separated (and separable) performers/doers and performances/outcomes and towards performing/ways of doing, through an active aesthetic (2014: 11-15, 35-52). This conceptual move is further expanded as an activator of interdisciplinarity in the Introduction to this volume.

^{vi} My understanding of voice in forensic contexts owes mostly to Baldwin & French (1990), French (1994), Hollien (2002), Karpf (2007: 255-73), Kreiman & Sidtis (2013: 237-59), Primeau (2014) and Rose (2002). Not all sources serve the same purposes or are of the same academic caliber, but a combined reading allows the interdisciplinary reader to extricate some underlying principles and presuppositions in this disciplinary area. Karpf's text addresses a general readership, but the author is well-read and therefore the chapter on voiceprints and voice theft can be an intriguing point of departure. Baldwin and French are concerned with phonetics and are largely critical of technological advances, especially when these are purported to be more reliant than experts. In Primeau's and Hollien's texts, the (more or less) implicit purpose of supporting (and advertising) specific methodologies might be disconcerting for a scholarly reader, but the books offer insights from professional practice and an accessible induction to programming software. A more detailed and well-referenced work is Rose's monograph, whereas a succinct but almost exhaustive summation of work in the area can be found in Kreiman & Sidtis.

^{vii} Greig's sensitivity to music and vocality is acknowledged by collaborators: 'David is pretty obsessed with all kinds of music, as I am, and any conversation about a new project between us often begins with a conversation about what the character of the music might be' (Wilson in Wallace 2013: 227). In an earlier play, *Pyrenees*, a character, Anna, recalls having a voice coach that told her, in relation to regional inflection, that 'people carry a landscape in their voice' (Greig 2010: 244).

^{viii} For a systematic examination of 'sounding Scottish' in Greig's work, read Inchley (2015: 63-80).

^{ix} The official video of the song, originally released in 2010, can be accessed here:

<https://www.youtube.com/watch?v=ISy0HI0SBfg>.

^x This scene is not incorporated in full in the published script. My analysis draws on my attendance of the performance and the radio version (BBC 2014).

^{xi} The sung lyrics are slightly modified (Sea Green Singers 2013).

^{xii} For videos of choir rehearsals and discussions of the choir's role, see:

https://www.youtube.com/playlist?list=PL-ieBTWRUfsIRH6li_jfxD0cCIgRzJm_k.