"This Music Kills Fascists"[1]: Cognitive Foundations of Emotional Arousal Associated With Discrete Musical Structures in Selected Picket Line Chants

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On Monday, September 23rd 2024, Unite Here Local 274 Aramark workers conducted a historic strike following a dramatic 84% authorization vote. For the first time in American history, concessions workers at all three sports stadia in a major city simultaneously left their cooking utensils and retail stands behind to demand "healthcare benefits and family-sustaining wages that adjust for inflation" (Unite Here Philadelphia Local 274 2024). In solidarity, I joined these workers on the picket line at Citizens Bank Park. As a passionate labor activist, I felt strong feelings; as a music theorist, I was curious if the music and sounds I heard catalyzed the intense emotional response. The vastly predominant aural stimuli being simple, repetitive chants, I aim to probe their role in arousing and intensifying emotion via the lens of current music cognition and perception research. What is it in this liberatory sound that promotes a sense of collective urgency? If we are to consider these chants as "protest music" in a psychosocial situation model, the existing literature can elucidate the ability of its discrete musical structures to evoke and enhance specific emotions in a way that bolsters pro-labor sentiment.

Existing research analyzes protest music[2], psychoacoustic mechanisms of emotional arousal, vocal and facial expression of emotion, and embodied cognition. None so far have addressed all these topics and correlated emotional arousal with discrete musical structures in picket line chants. To do so, first we must frame picket line chants as a musical repertoire with discrete structures and manipulable musical parameters to explore. I intend to explore how picket line chants gain political agency and, in turn, apply a psychoacoustic model for the expression and perception of emotion. Such a model will associate discrete musical structures present in picket line chants with specific emotions via their common valence and arousal, as in Juslin & Sloboda's 2010 model[3]. Addressing the intensity of the resultant emotions, David Huron's

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[1] In the midst of the second World War, Woody Guthrie famously painted on his guitar an inspiring inscription regarding the political force of music: "THIS MACHINE KILLS FASCISTS". I co-opt his sentiment here, challenging whether it is indeed the material tools (the instrument, the "machine") that are responsible for shining light on injustice and catalyzing political change. Rather, I suggest that it is the music that the machine helps deliver, accessible to all through our body's natural instrument, the voice. While machines require at least a modicum of learned (whether formally or informally) technique, picket line chants as an amateur music-making event evoke intense emotions and result in powerful delivery of a political message. Is it hyperbolic to insinuate that corporate overlords failing to negotiate in good faith are "fascists" (or that the music "kills" them)? Perhaps, but I think not. Given the Merriam-Webster definitions of fascism: "1: a political philosophy, movement, or regime (as that of the Fascisti) that exalts nation and often race above the individual and that stands for a centralized autocratic government headed by a dictatorial leader, severe economic and social regimentation, and forcible suppression of opposition 2: a tendency toward or actual exercise of strong autocratic or dictatorial control", corporate strikebusters (at the least, those at Aramark) are guilty of a majority (but not all) of the above criteria. In section 5, I explore the racial, social, and economic implications of the strike, elucidating the sharp divide between the "haves" and the "have nots". Additionally, the racially homogenous plutocracy leading Aramark forcibly suppresses the will of their own employees by denying fair pay and healthcare benefits, considering them expendable by recruiting "scabs" to take the place of any who oppose.

[2] Infrequently addressing unpitched chant, save for the work of Noriko Manabe.

[3] Juslin & Sloboda's model depends on James Russell's 1980 Circumplex Model of Affect. While dated in 2024, dimensional models of affect continue to be cited in contemporary literature.

ITPRA theory sheds light by investigating the roles of expectation and subversion. We will explore the weaponization of noise on the picket line and, finally, probe the role of individual difference through a raciocultural lens, exploring for whom these picket line chants are performed and whether they are successful. Here I hope to contribute to the discussion surrounding the interface of music, politics, and emotion by applying multiple methodologies: psychoacoustics, sociology, music cognition & perception, intersectional feminism, and aesthetic theory/philosophy. A thorough understanding of inequality and its expression, embodiment, and emotion in protest music provides social movements with agency and ammunition. The visceral affective response is one of our greatest tools to demand change.

1. From chant to "song" to political force

The history of strike actions in the United States[4] is long and varied. Economists suggest that the driving force behind strikes is an undervaluation of the labor of rank-and-file members by employers in terms of compensation (Ashenfelter and Johnson 1969), although workers often also demand better working conditions, work-life balance, and other non-monetary benefits (Uzoh 2021). The cruciality of music on the picket line – even as seemingly banal as unpitched chants of "What do we want? Contract! When do we want it? Now!" – cannot be overstressed. Imagine engaging in any type of protest with your proverbial mute button pressed or speaking in conversational tone – very likely the emotional intensity of the experience has been diminished. Understanding the emotion-arousing potential of picket line chants necessitates that we (1) understand the greater context of inequality, (2) frame chant as musical expression with multiple layers of meaning, and (3) probe the process through which sound is politicized.

The essential story of a labor strike is that of inequality, which crops up at the Philadelphia stadia in more ways than one. Oligarchic corporate leadership – with higher paid positions and sociocultural privilege – controls the fate of the working masses. Employees (especially those not yet represented by a labor union) typically have little or no say regarding their own salaries, benefits, and working conditions while employers make decisions behind closed doors based on what they assert is "economically feasible" or "fiscally responsible" (that is, until a breaking point is reached). "Women workers, particularly women of color, experience multiple types of inequality in the labor force, including gender and racial wage gaps, occupational segregation, and a disproportionate burden of costs associated with caregiving." (US Department of Labor n.d.). While exploring the complex power dynamics of the labor movement, it is essential to consider how lenses are tinted by elements of identity. All but powerless, workers reconcile this inequality through solidarity. While an individual in isolation can easily be taken advantage of, a majority group of laborers are much harder (financially, socially, and organizationally) to ignore.

How, though, are these often-rhythmically unorganized, gnarly and abrasive, decidedly unvirtuosic vocal trebuchets hurled at Citizens Bank Park possibly viewed as "music"? To do so, I argue, is akin to assigning aesthetic value. Juslin and Isaksson (2014) identify several "subjective criteria for choice and aesthetic value of music": beauty, wittiness, originality, taste, sublimity, expression, complexity, use as art, artistic skill, emotion arousal, message, representation, and artistic intention. It is important to note, though, that these criteria serve to frame the diversity implicit in aesthetic perspective rather than to construct a quantitative

[4] And worldwide (Ness 2013).

scorecard of worth. Study authors themselves acknowledge that there are "individual differences in how criteria for aesthetic value are weighted" (Juslin 2019). The plurality of above criteria evident in shouts of "Shame! Shame! Shame on Aramark!" qualify it for discussion. Furthermore, Manabe (2019) identifies elements of musical form in protest chant. Chants are typically heard in sentence form: basic idea → basic idea, with variation → continuation (as seen in Appendix A1, A1a, and A3); or in period form: an antecedent-consequent relationship, or "call and response"/"question and answer" (as seen in Appendix A2 and A5). Period form chants undergo motivic development via augmentation and diminution (Manabe 2015). Figure 1 shows a chant initially two measures in length that eventually experiences rhythmic halving (last measure), promoting excitement via rhythmic density and syncopation.

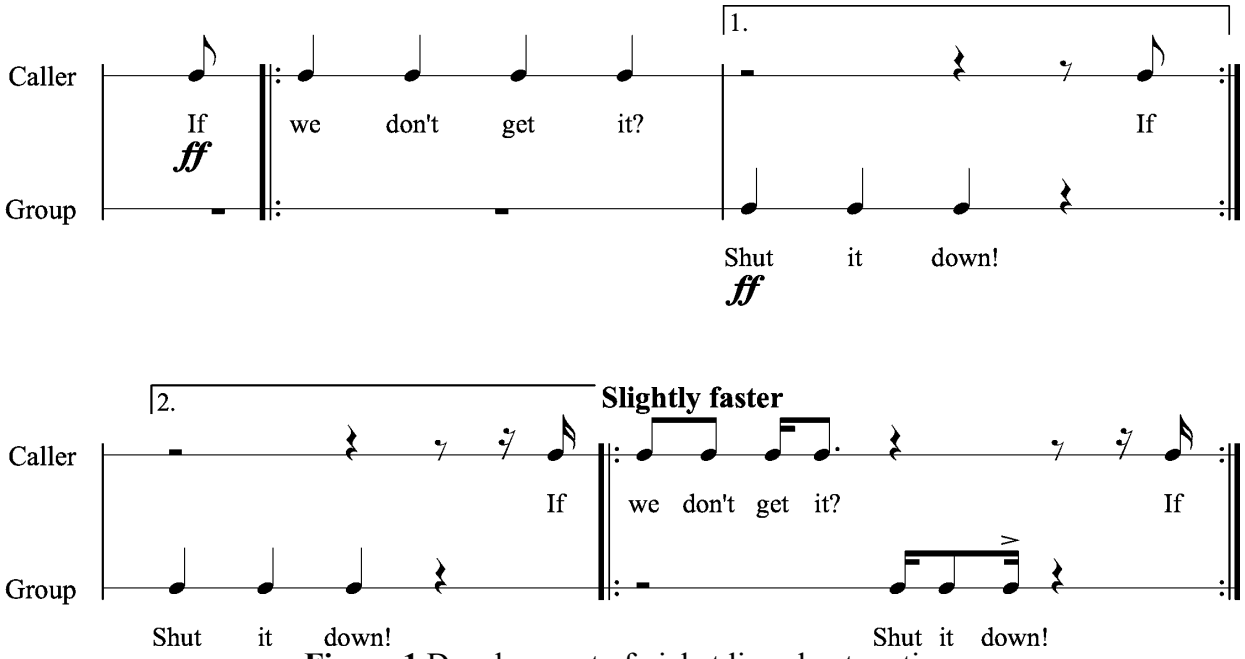

Figure 1 Development of picket line chant motive

Musical dimensions such as rhythmic organization, coordinated and embodied performance, formal structure, motivic development, and expressive intent elevate the discourse, gaining rhetorical force and collective significance. Further, music can be viewed as gaining political agency in three ways: through intentionality, materiality, and aesthetic experience (Garratt 2019). The first of these three qualities is simple to comprehend: our intent for protest song to be political is what makes it political. Music, however, is not an empty vessel into which intention is poured. We should recognize that the materiality of musical sounds and instruments (voice included) imbues "vitality" and "thing-power", that is "the capacity of things…not only to impede or block the will and designs of humans but also to act as quasi agents or forces with trajectories, propensities, or tendencies of their own" (Bennett 2010, pp. xvi and viii). Bennett argues that such materials act as agents of social change, disrupting the present and propelling us towards some different path forward. Theodor Adorno views art such as protest music as a *promesse du bonheur*, a promise of the happy future for which we will endlessly strive (1997, emphasis added).

Finally (and most importantly to our model of discrete musical structures in picket line chant and their capability to arouse emotions), protest music's "sonic configurations and affective power enable it to be heard and felt by listeners in ways that confer political agency on it" (Garratt 2019, p. 25). One element of aesthetic beauty in music is its transformative ability to reflect the dissonances of the conflict in which it finds itself. We can expect the musical qualities of labor strike music responsible for arousing strong emotions to be more closely associated with the profane than the sacred. Indeed, delayed resolutions, non-traditional harmonic progressions, melodies that avoid where they began, eschewal of clean timbres, "rasping voices, scraped strings, and electronically enhanced distortion" are highly correlated with political music (Shank 2014, p.3). Their causal relationship with the arousal of emotion can be elucidated through an understanding of music cognitive mechanisms.

2. From political force to social emotion

On the path toward meaning, music makes us (performer and listener alike) empathize and feel. Musicians often describe the emotional catharsis of performing; listeners are "moved" from one emotional state to another. Music acts as a vehicle, wherein thoughts and feelings can be passed from one individual to another. Sans recipient, communication has no purpose. Yet music performed is never without listener, as the first set of ears to process the sound is the musician themselves. Juslin (2019) models this emotional infection in two broad stages: expression and perception.

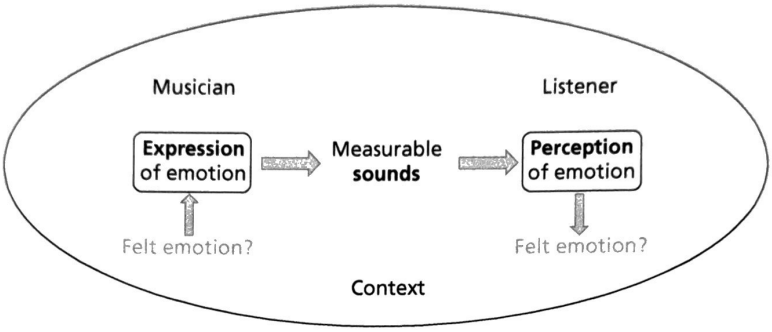

Figure 1 Expression of emotions in music (Juslin 2019, p. 74).

First, the source (which very well could be you yourself, chanting along!) engages in *expression* of an emotion, which may or may not be felt by the source themselves. For example, Sir Ian McKellen may or may not have been himself feeling the righteous fury he portrayed while casting the Balrog back to the Shadow on the bridge of Khazad-dûm. Nonetheless, it is his portrayal of behaviors associated with that emotion which serves to communicate the aforementioned righteous fury. From a semiotic perspective, we might call this an *iconic* relationship between the *signifier* (Sir Ian McKellen's portrayal) and the *signified* (Gandalf's righteous fury). An icon (as opposed to an index or symbol) is a sign ("signifier") that exhibits close physical resemblance to that which it depicts (the "signified").

Next, the listener engages in *perception* of an emotion by recognizing "several probabilistic (uncertain) and partly redundant acoustic cues" (Juslin and Sloboda 2013, p. 598). Sir Ian McKellen provides a number of emotional cues as he: grimaces his face, authoritatively yells a

command at a rate slower than normal conversational speech, and defiantly raises his staff. Nevertheless, facial grimace might signify fury for some viewers, but it might not for others. Its effect is probabilistic. The association between the signifier (facial grimace) and the signified (fury) may even be culturally derived (Patel and Demorest 1982). Nevertheless, these cues are also *redundant*: Sir Ian McKellen could (undoubtedly, given his talent) portray righteous fury adequately without employing the totality of the above-mentioned behaviors (facial grimace, authoritatively spoken command, and raising of staff). Perhaps he grimaces his face and raises his staff but instead whispers underneath his breath at a conversational rate, "you shall not pass." Either way, you can tell he means business.

This *perception* of emotion (the audience *recognizing* the expression of fury) may or may not result in *arousal* of a similar emotion in oneself. Gandalf's recitation of his iconic line *might* cause you to feel righteous fury yourself as a result of observing that emotion in him. It also might not. In the realm of emotions, almost nothing is certain. Perception is so variable that no two people even "hear the 'same' music" (Juslin 2019, p. 382). Nevertheless, this model (Figure 1) seems an innate part of our human experience, observed since early childhood (Adachi & Trehub 1998).

The intensity of these experiential aspects of music is modulated by the interplay of multiple factors (Gabrielsson 2011) and governing all these factors is *context*. A strike is necessarily a social experience – solidarity with a large group is essential for success. When we chant together, our emotions can be influenced by those of the people around us (Becker 2004), an emotional *contagion* (Juslin 2019). Our mere proximity to angry/empowered/defiant folks chanting is enough to arouse feelings of anger/empowerment/defiance in us. As the group grows and the chants reach an overwhelming crescendo, our emotional reaction intensifies due to the *brainstem reflex* – an "override" system (Juslin 2019)[5] responding to the high volume and serving to alert us to events requiring first-priority attention (Simons 1996).

Music, necessarily existing in a social context, gains meaning through emotion: felt, expressed, perceived, and aroused. Picket line chant exploits the social nature of music by moving from a presentational approach to a participatory one (Turino 2008). That is, the convergence of performer and listener. Striking laborers are socially bonded as a result of participation in the group activity and their focus on each other's words and sounds (Turino 2008, pp. 28 – 41).

3. "The way you make me feel": music and intense emotions on the picket line

Not only does music possess the capability of infecting us with emotion, it is often quite a strong effect. Another modulatory factor intensifying musical experiences is that of control (or lack thereof). Central to the dogma of strike actions themselves is the reconciliation of power imbalance between the rank-and-file members and the powers that be (their bosses), particularly surrounding the autonomy of laborers to control their own destiny. This lack of control over one's own destiny shows up as a powerful cognitive mechanism of musical experience. In contrast with listening experiences of recorded music where the listener often has control of the music's sequence, volume, duration, etc., live musical experiences (such as concerts, worship services, protests, labor strikes, etc.) are all but under control of the listener. This results in

[5] Akin to the "startle" response (Simons 1996).

"surprises or strong 'aha!' moments when recognizing an unexpected song choice [for example], which evokes emotional associations" (Juslin 2019, p. 388). These emotional associations are some of the most intense (Lamont 2011) with one study suggesting that 73% of peak experiences involve live music, inherently not under control of the listener (Gabrielsson 2011).

These intense musical situations reflect the intense emotions that initially motivated the labor strike: pent-up anger, frustration, annoyance with the employment's status quo. Dimensional models of affect seek to make sense of the complicated and subjective nature of emotions by comparing their essential attributes. Imagine a linear scale: sad …… to …… happy. On any day, at any moment, your mood may be somewhere on this spectrum, left to right. This "dimension" is valence ("positive valence" being happier, "negative valence" being sadder). Another dimension of affect is arousal: apathy and depression feel very different from outrage and anxiety (despite all being negative in valence). Emotions on the picket line are described as possessing "high arousal" and "negative valence[6]" in James Russell's 1980 Circumplex Model of Affect[7] (see Figure 3, upper lefthand quadrant).

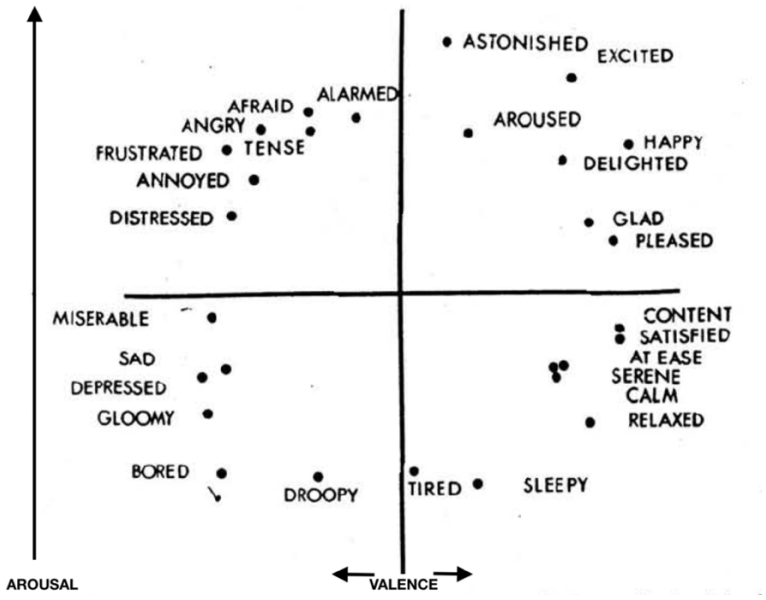

Figure 3 Russell's Circumplex Model of Affect
(1980, p. 1169)

Emotions in this quadrant of the model were associated with discrete musical structures by music psychologists Patrik Juslin and John Sloboda: "high sound level, sharp timbre, spectral noise, fast mean tempo, small tempo variability, staccato articulation, abrupt tone attacks, sharp

[6] Emotions are evaluated under the umbrella of "affect", possessing many qualities but here reduced to two: valence (a positive or negative evaluative feeling towards a person, place, event, etc.) and arousal (the embodiment of that feeling in the subject, to distinguish from purely cognitive *perception* of that feeling in another individual) (Juslin & Sloboda 2013).

[7] Note: if a bidimensional model of affect seems reductive, I agree. Some (Latinjak 2012) have proposed a third dimension: "future related" vs "past related", however further research is necessary to correlate the tridimensional model with discrete musical structures.

duration contrasts, accents on unstable notes, large vibrato extent, and lack of ritardando" (2010, p. 463). Picket line chants at the September 23rd Unite Here Local 274 strike exhibited nearly all of these structures:

Musical structures[8]	***Features of Unite Here Local 274 picket line chant***	***Cognitive mechanism***
High sound level	megaphone amplification and coordination of chanting in a large group	Brainstem reflex (see section 2)
Sharp timbre	*Vocal harshness*: due to untrained vocal technique, the felt expression of anger results in physiological changes in vocal production (such as pressed phonation[9] as an effect of increased tension in laryngeal musculature coupled with increased subglottal air pressure (Johnstone & Scherer, 2000)).	Enculturated association of anger with high frequency energy in the spectrum (Juslin 2000)
Spectral noise	evident in audio recordings due to: generator noise continuously inflating the large "Scabby the Rat", marching footsteps, and passing cars honking in solidarity (see Figure 4b vs 4c)	Enculturated association of anger with auditory roughness (Lieberman and Michaels, 1962; Scherer and Oshinsky, 1977)
Fast mean tempo[10]	not observed	Inconclusive, potentially high beat rate associated with high heart rate of aroused states?
Small tempo variability (specifically, "microstructural timing pattern (i.e., deviations from strict regularity" (Juslin & Madison 1999))	Chant callers frequently "step on" the response. The picket line chant notated in Figure 5 exhibits a call and response (question and answer) between a single chant caller and the larger group. Frequently, the chant caller deviated from strict regularity by repeating the call a sixteenth-note ahead of what would be expected. This results in a perception of "quickening", a rhythmic propulsion sonically agitating the group's expectation of meter, and thus, increasing arousal.	Enculturated association of fear with tempo(/sound level) variability, unpredictability (Juslin & Madison 1999)
Staccato articulation & abrupt tone attacks[11]	Picket line chants represent a form of folk song; their tessitura are necessarily narrow, melodies largely devoid of melisma, accompanying monosyllabic text in order to	Prosodic contour: timing patterns in speech confined by what can be

[8] Juslin & Sloboda 2010, p. 463

[9] Pressed phonation alone can be perceived as a "tense voice" (Sundberg 2013)

[10] Ultimately, Juslin (1997) found that the performer's expressive intention had no statistically significant effect on tempo. There were, however, statistically significant differences between tempi comparing excerpts expressing "happy" vs "sad" and "sad" vs "fearful".

[11] While easily differentiable in non-vocal music, the parameters of articulation (perceived as "proportion of sound to silence in successive notes" (Juslin & Laukka 2003, p. 791)) and rate of tone attack are generally inseparable in amateur vocalization.

	be as accessible as possible. As a result, articulation tends to sway staccato with early formant placement.	spoken in one breath (Frick 1985)
Sharp duration contrasts	adjacent duration ratios of up to ~ 4:1 observed	
Accents on unstable notes[12]	As a result of low pitch discreteness (see Figure 4b), it is not possible to compare dynamic accent to pitch. However, even substituting the prosody of conversational speech as proxy for tonal pitch resolution, picket line chants in this study generally did not subvert dynamic expectation.	See footnote 12.
No ritardando	spectral analysis indicates consistent inter-formant interval (approx. 490 ms)	Unknown, necessitating further research
Large vibrato extent	not observed	Unknown, due to inaccessibility of source material[13]

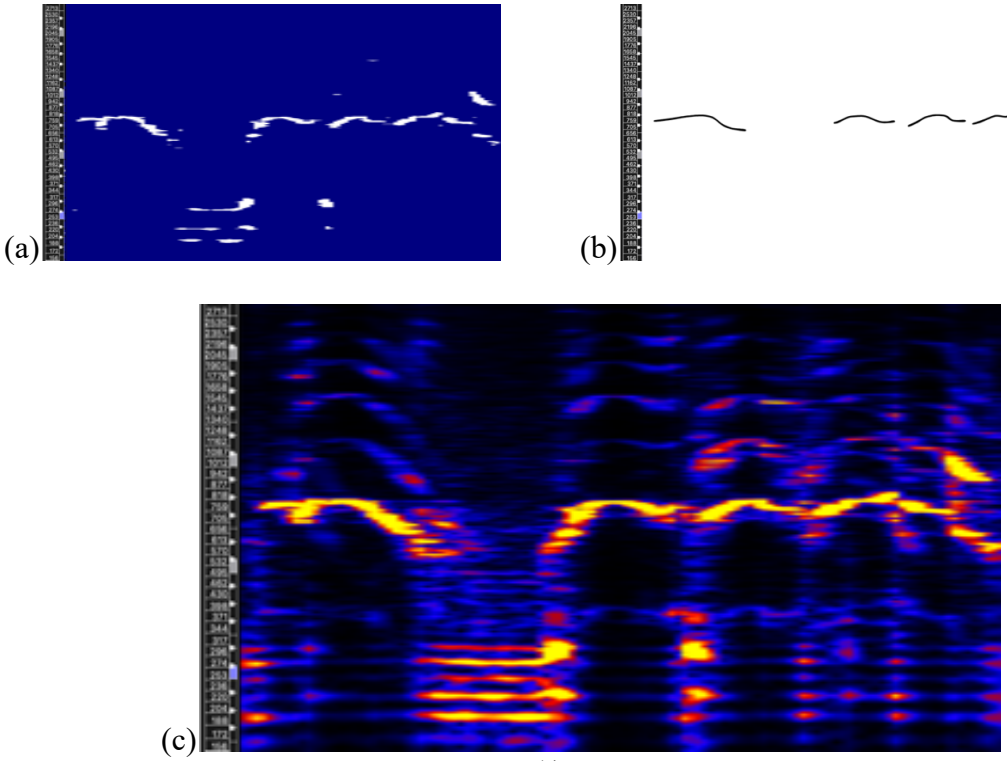

Figure 4 (a,b,c) Melograph analysis[14] of "Shame! Shame on Aramark!"

[12] "Unstable notes" likely refers to pitches that tend to resolve tonally within a 12-TET system, however this was not possible to independently verify due to the inaccessibility of Juslin & Sloboda's primary source: Lindström, E. (1999). *Expression in music*: *Interaction between performance and melodic structure*. Paper presented at the Meeting of the Society for Music Perception and Cognition, Evanston, USA, August 1999.

[13] Ohgushi, K., & Hattori, M. (1996). *Acoustic correlates of the emotional expression in vocal performance*. Paper presented at the Third Joint Meeting of the Acoustical Society of America and the Acoustical Society of Japan, Honolulu, Hawaii, December 1996.

[14] Method derived from Phillips & Brown 2024.

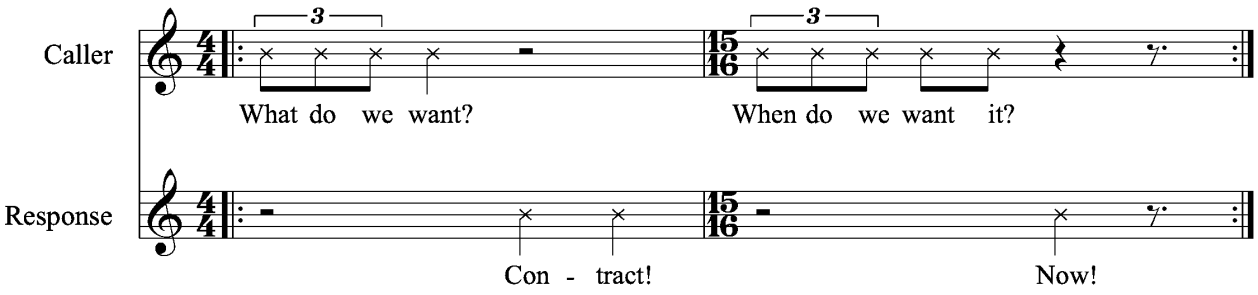

Figure 5 Caller "stepping on" response

Altering the timbre of vocalization (for example) serves as a figurative gesture, which Delalande (1988) classifies as being solely sonic in nature, having no direct association with physical movement. Expressive musical gestures are not limited to those which are audible, though; consider co-speech gesture. In contrast with the relative stillness found in formal music performances, picket line chants are usually accompanied by significant physical movement, typically in the form of marching. These non-sound-producing movements serve to emphasize the underlying emotional expression (Palmer 2013), perhaps that of a militaristic defiance. While these movements tend to be accompanying/ancillary gestures (they have little or no impact on sound production), Davidson (1993) suggests that ancillary gestures can influence perception of emotion as these movements communicate expressive intent, reinforcing acoustic cues.

I observed a correlation between the tempo of picket line chant and the pace rate of the accompanying march movement. A 1964 laboratory study[15] found that human locomotion occurs preferentially at a rate of approximately 120 steps per minute (Murray et al) with additional research suggesting that "this spontaneous tempo of locomotion represents some form of central 'resonant frequency' of human movement" (MacDougall & Moore 2005). This movement is "frequently synchronized with the tactus level pulse" (Toiviainen et al 2010, p. 59) of the music it accompanies. Therefore, it should come as no surprise that spectral analysis of recorded Unite Here Local 274 picket line chant audio (notated in Appendix A - 1) revealed a tempo of approximately 122.2 beats per minute, visibly synchronized with the rate of marching outside of Citizens Bank Park.

The mechanisms by which chants elicit strong emotional responses are not a mystery. Through a survey of empirical research, the power of strike music to make us feel can be associated with discrete musical structures. Intensified by a sonic lack of control (while simultaneously *taking* control politically), chants are strategically performed in a manner that agitates. A number of cognitive mechanisms are at play, many enculturated from interpreting emotion in speech. Deeper than the surface-level meaning of the words chanted, the manner in which they are sung imparts meaning (even when divorced from words themselves).

[15] It should be noted that the 1964 Murray et al. study perpetrated academic sexism by considering "sixty normal men" (presumably cisgendered males, given historical context) a representative sample. MacDougall et al. later validated the original finding's universality by demonstrating "no evidence of a correlation with weight, body mass index, or gender [presumably referring to biological sex]" (2005, p. 1170).

4. "And it takes us unexpected places": of expectation and subversion

An interesting phenomenon can be observed when voices eventually tire and instruments begin to dominate the picket line orchestra. The lyrics of a chant can become well-entrained in the simple rhythmic motive that previously carried them such that the words are no longer necessary to convey the same meaning. David Huron (2006) establishes a cognitive mechanism for musical expectancy resulting from repetition: "The brain does somehow represent these [sound tokens[16]] (or, at least, properties of these [sound tokens]) and is able to use these representations to form expectations about the properties of future [sound tokens]." (Huron 2006, p. 102). Here, the brain appears to have represented the textual property of a previously vocalized chant with its accompanying rhythm and (in absence of the lyrics) retains the association, expecting more of the same. As a result, either the vuvuzela or the snare drum alone can be heard separately and distanced by a time interval while still impactfully carrying a faint mental representation of the text due to dynamic predictability (Huron 2006) within the picket line's musical ecosystem.

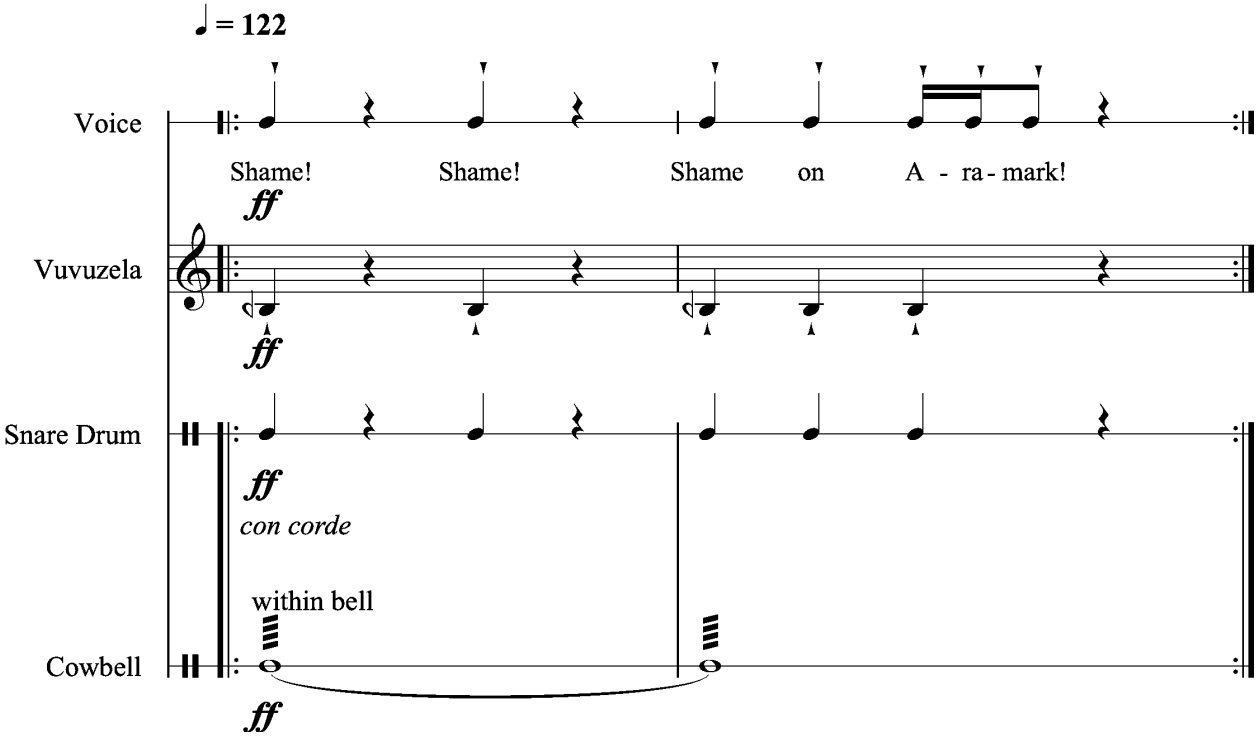

Figure 6 Picket line ensemble, notated

Throughout the Unite Here Local 274 strike, the rapid tremolo of a cowbell played crudely by wildly flailing a drumstick within it was continuously heard for hours near the entrance to Citizens Bank Park. This location (by no coincidence) was where HR representatives would usher in "scabs"[17] crossing the picket line. While an isolated sound gesture (not musically coordinated or interacting with the rest of the picket line ensemble), the juxtaposition notated in

[16] The original Huron text here reads "squiggles", referring to a visual representation of time-variant pressure signals.
[17] Non-union temporary workers attempting to replace those striking.

Figure 6 highlights a dualism: expressive chant simultaneously heard against pragmatic sound. Further enhancing the metaphoric militarism of picket line music, instruments can become psychological weapons antagonistically aimed towards those considered worthy of offense (corporate bosses and "scabs"). This is likely heard as "noise" due to its auditory roughness ("constant, rapid amplitude fluctuations in the sound spectrum in the range of 20-200 Hz" (Liew et al 2018, p. 2, Parncutt 1989)), however we must treat noise (especially in the context of strike action) as music due to its: ability to express emotion, the perception of emotion heard in it, the psychophysiological response to it, and its use as a structural element of audio design.[18]

What was this person trying to accomplish with their aural assault? Evoke fear. A 2018 experimental study (Liew et al) examined the effect of auditory roughness on perception cross-modally (sonic → visual). Researchers embedded electronically generated sounds of variable roughness within a live musical performance. Participants were asked to collectively vote to create the shape of a visual graphic after listening. Shape design was significantly predicted by auditory roughness, positively correlated between roughness of the sound and spikiness of the graphic. Such angular shapes have been correlated with two emotions: fear and contentment (Lu et al 2012)[19]. As earlier established, emotions on the picket line are generally of negative valence (no one is feeling content here…), leading to the connection between cowbell noise, mental representation as spiky graphic, and concomitant arousal of fear.

5. Broadening out: harmonies and dissonances of difference

We humans are not all the same. A discussion of music perception would be remiss not to acknowledge that we do not all hear the same, feel the same in response to music. It is my personal belief that this quality is a beautiful one and I hope that the psychoacoustic approach to analysis that I have generally employed here leaves space for individual difference. I would, however, like to explore the role that identity plays in a salient, historically marginalized community. Juslin (2019) acknowledges the role of identity in perception by proposing the model of musical event: an interaction between music, listener, and situation, all coloring our experience simultaneously.

It is essential to investigate the role that race plays in the Unite Here Local 274 strike. Racial and economic segregation in Philadelphia results in a vast disparity of pay for black workers. Exacerbated in the hospitality sector, black workers are disproportionately represented in Aramark's lowest paying positions ("Black work matters report: Race, poverty, and the future of work in Philadelphia" n. d.). Further perpetuating the divide, the c-suite and executive leadership at Aramark is almost exclusively white, with one single person of color (Chief Diversity & Sustainability Officer) out of ten ("Leadership" n.d.). According to the 2010 US Census, African American Philadelphians made up 44% of the city's population, much higher in proportion than the nationwide 13.6% (U.S. Census Bureau). Therefore, with more at stake and against greater odds, it is likely that black folks' emotional experiences surrounding Unite Here Local 274 picket line chant will be primarily modulated by social (rather than psychoacoustic) factors.

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[18] Due to its low level of prototypicality as a musical experience, we might disprefer it (Martindale 1988) but its role in emotional arousal at the picket line is worthy of inquiry.

[19] Perhaps the connection between noise, spikiness, and perceived contentment could be understood in the context of "white noise" (as well as various other "colors" of noise) commonly used for calming effect.

This raciocultural mismatch highlights an important question: who, then, is the "audience" of these picket line chants? Temporarily casting aside the pragmatism of noise violence, I argue that these chants primarily serve the purpose of rallying a base of peers rather than communicating with an external body (especially one composed of greater cultural heterogeneity). Dialect theory demonstrates that perception of an emotion tends to be more congruent with the intention of the expressor when the perceiver belongs to the same cultural group (Elfenbein & Ambady 2002, Eerola 2006), as if they are speaking the same "dialect" of a "more universal grammar of emotion" (Tomkins & McCarter 1964, p. 127). Further, a motivation-based other-group bias exists, resulting from differences in *display rules* (governing the deliberate regulation of an expression's appearance), *decoding rules* (governing the deliberate regulation of the "decoding" of emotions expressed by another individual), and the decreased amount of attention we choose to give to the emotions of those outside our cultural homogeny (Elfenbein 2015). Strike participants – by and large within the raciocultural and socioeconomic in-group – hear, participate in, interpret, and understand the emotional messages embedded in picket line chants to a greater extent than corporate strikebusters. Further, let us investigate the intersection of race with another historically marginalized identity. Black women were "central actors in both the ferocity of the strike that birthed the political usage of 'We Shall Overcome' and the transition of the song from a strike ballad to a civil rights anthem." (Redmond 2014). The tradition of black women as leaders in strike music continued at Citizens Bank Park with many black women serving the role of chant caller.

Towards an even broader question: beyond the arousal and amplification of participants' emotions, how does picket line chant (in tandem with the resultant emotions it evokes) serve to propel striking laborers towards successfully achieving satisfactory working conditions? Sociologist Ron Denisoff identified six ways in which "songs of persuasion" help social movements achieve change (1966):

	Denisoff primary goals of propaganda song (1966, p. 582)	***Features of Unite Here Local 274 picket line chant***
1.	"The song attempts to solicit and arouse outside support and sympathy for a social or political movement."	The venue of performance was a public intersection adjacent to an entrance to Citizens Bank Park. Both in-person via passersby and on-air via television news broadcast, the picket line chant served as an omnipresent platform elevating the discourse to new heights of visibility.
2.	"The song reinforces the value structure of individuals who are active supporters of the social movement or ideology."	The strenuous activity of chanting loudly and marching vigorously for hours on end serves to reinforce that the motivating factor of the walkout was not a "laziness" or an "unwillingness to work", but rather a reinvestment of their labor into a social performance[20] demanding a better tomorrow.

[20] Note that the use of the term "performance" here is not in any way intended to suggest that the use of music in protest is self-aggrandizing or devoid of genuine investment in change, as in "performative activism." Rather, here we acknowledge the framing of picket line chant as an art of reproduction intended for reception by an audience.

3.	"The song creates and promotes cohesion, solidarity, and high morale in an organization or movement supporting its world view."	Chanting in unison with a larger group fosters a sense of collective identity. Some chants do involve a singular caller with a group response yet, eventually, this leader will return to the fray, joining their peers and allies in solidarity. By "[providing] information in compact, often highly memorable and emotionally charged ways" (Reed 2006, p. 299) common to a large body, morale is lifted by recognition of social belonging and alignment of purpose.
4.	"The song is an attempt to recruit individuals for a specific social movement."	Here I choose to zoom out on the picket line by zooming in on one word: "we", as in "What do *we* want? (Contract!)". Who is the "we" here? Is "we" fixed or figurative? It might be tempting to reduce this "we" to *these particular* Unite Here Local 274 workers that are participating in *this particular* strike. (After all, they are the "we" saying "we".) However, striking laborers do not view it this way. A central pillar of the labor movement is that of solidarity: "an injury to one is an injury to all."[21] In this sense, the "we" in question is the ever-increasing sum total of working-class folks within earshot, a proletariat "we" suggesting you, too, can reap the rewards of our struggle if you join the "we". In framing this transcendent "we" as such, hearers of picket line chant are recruited by forcing them to see their own reflection in the injustice before us all, to join the fight.
5.	"The song invokes solutions to real or imagined social phenomena in terms of action to achieve a desired goal."	Not only do picket line chants provide solutions, they go further by laying out concrete steps to propel us closer towards the goal. In this strike, workers strive for fair wages and healthcare benefits – on the journey towards those goals, we hear steps to a solution: we want a (1) *contract* and can achieve that contract by publicly (2) *shaming* Aramark into submission.
6.	"The song points to some problem or discontent in the society, usually in emotional terms."	The picket line chant notated in Appendix A – 1 ("Shame! Shame! Shame on Aramark!") very intentionally calls out the problem and does so in terms of *shame*. Shame is a social emotion (Tracy 2007) that promotes behavior deemed appropriate in the moral and/or social domains (Leith & Baumeister 1998). This requires a reframing of our music-as-

[21] This quote has traditionally been credited to David C. Coates, former Lieutenant Governor of Colorado, president of the American Labor Union, and chairman of the American socialist National Party. Nevertheless, it has since transcended to become the motto of labor union International Workers of the World and a rallying cry for the labor movement in general.

		communication model (Figure 1) such that the listener is now a decisionmaker at Aramark. We now seek to arouse emotions in our opponents rather than our colleagues, as in "they should feel shameful for causing this problem."

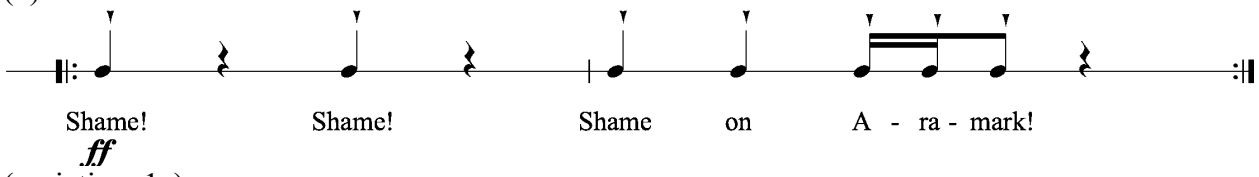
6. For the future

Labor strikes are intense; strong emotional experiences cannot be avoided. Nor should they be! Strong emotional experiences are a tool for change. Emotion plays a large role in the success or failure of chant on the picket line as a tool for social engagement and recruitment, a psychological motivator to continue, a cathartic expression, even as sonic warfare. As humans, music is one of our strongest and most universal methods for expressing and infecting our emotions. If you want to ensure success: be loud, engage emotionally, eschew musical conventions, alternate chants with instruments mimicking the rhythm/melody, incorporate your body, invite your friends, and believe in the power of the union.

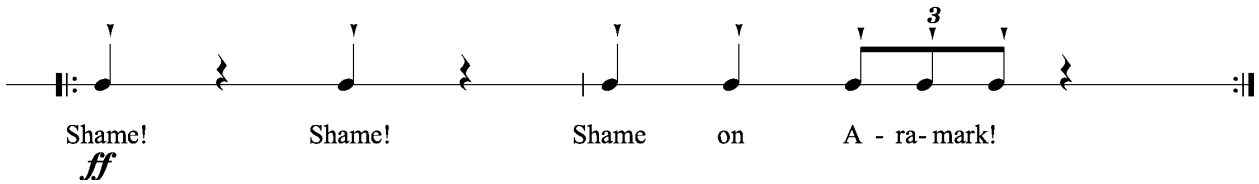
" 'Cuz the power of the union don't stop. "

Appendix A: Picket line chants in "motto" form

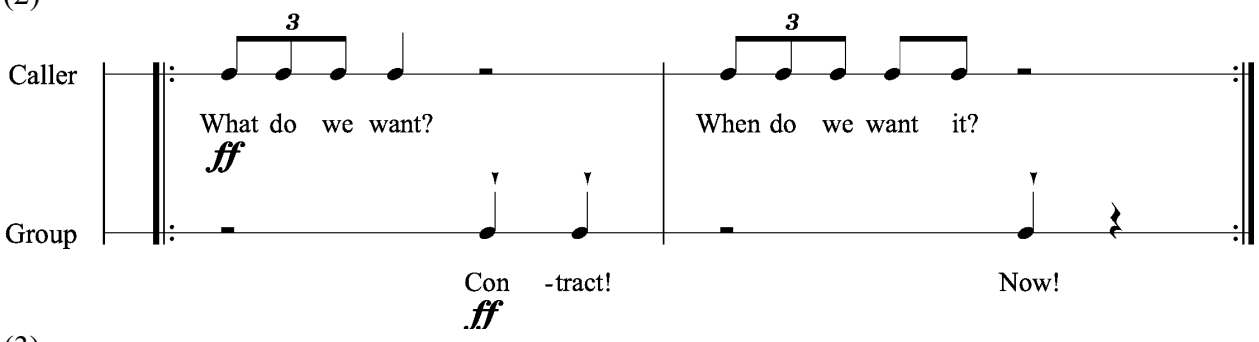
(1)



(variation, 1a)



(2)



(3)

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