

Unjust noise

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In this paper I argue that noise is a significant source of social harm and those harmed by noise often suffer not merely a misfortune but an injustice. I argue that noise is a problem of justice in two ways; firstly, noise is a burden of social cooperation and so the question of the distribution of this burden arises. And, secondly, some noises, although burdensome, are nevertheless just because they arise from practices that are 'reasonable'. I offer a number of distinctions, between necessary and unnecessary noise, between public and private noise and between reasonable and unreasonable noise. What justice requires will differ according to what kind of noise we consider. My purpose is to give normative urgency to the problem of noise by understanding certain instances of it as not merely annoyances and nuisances but instances of injustice.

Key words: noise, justice, environment, Rawls

Philosophers have had little to say about noise, except to complain about it.¹ However, noise is a significant source of social harm and those harmed by noise often suffer not merely a misfortune but an injustice. I argue that noise is a problem of justice in two ways; firstly, noise is a burden of social cooperation and so the question of the distribution of this burden arises. And, secondly, some noises, although burdensome, are nevertheless just, because they arise from practices that are 'reasonable'. I will begin by offering a definition of noise and then make a number of distinctions between necessary and unnecessary noise, between public and private noise, and between reasonable and unreasonable noise. What justice requires will differ according to what kind of noise we consider. My purpose is to give normative urgency to the problem of noise by understanding certain instances of it as not merely annoyances and nuisances but instances of injustice. This is an argument for less noise, but, on the other hand, I will argue that we have reason to tolerate and tolerate certain kinds of reasonable noises.

Noise is usually defined as ‘unwanted sound.’² Sound itself is not noise, of course; it is variations in air pressure to which our auditory nerves are responsive (sound is initially energy waves of air molecules which are transformed into mechanical energy in the ear, and this energy is then transformed into electrical energy in the brain). What turns sound into noise is that it disturbs, annoys, and perturbs the hearer; interferes with communication; and can be damaging to physical and mental health. Noise can cause significant physical and psychological harm; apart from deafness caused by persistent exposure to noise above certain thresholds, sudden noises cause a ‘startle reaction’ (a combination of the tightening of blood vessels and the release of adrenalin) and also interference with the digestive system and sleep. Noise can also cause feelings of distress, anger, fatigue, and helplessness. When noise is used maliciously in order to cause such physical and mental effects, where bodily integrity and individual autonomy are violated, as when it is used for torture for example, then this is obviously an immoral use of noise.³ My concern in this paper is not the immoral use of noise. However, noise that is not *intended* to cause harm can, nonetheless, have detrimental effects on people’s lives and be a source of significant harm.⁴

Insofar as noise is *unwanted* sound there is a subjective element in any attempt to define what constitutes a noise. In saying what noise is, we need to separate the hearer from the source of the noise (see Langdon 1985: 148). While we tend to attribute noisiness to the source of a sound, it is the experience of a sound *as* annoying that prompts the hearer to declare a sound noisy. Obviously, no sound is noise without someone hearing it *as* noise. Social science research shows that there is considerable variation between individuals in their classification of sounds as noise. Naturally, a great deal depends on the environment in which the judgment is made (we are less tolerant of noise in a library than on a busy city street) and particularly on the predispositions of the persons concerned; some people are just more sensitive to noise than others.⁵ Nevertheless, survey research has resulted in very good predictions of what a population overall will judge to be noise. Furthermore, certain kinds of sounds are more likely to be judged as noisy and so we can predict fairly well, by identifying a source of noise, whether it is noisy. For example, while loudness is an important factor in classifying a sound as noisy, frequency and pitch are important as well in predicting which sounds are likely to be unwanted, along with the duration of the sound, the number of times the sound is heard, the time of day, and the background environment in which the noise occurs (Langdon 1985: 144–160). This body of research thus smoothes out the subjective differences and allows for a fairly objective assessment of noise which then forms the basis for regulations and restrictions on noise.⁶

Society is a noisy place and ideally there are many noises that one would eliminate if it were possible; the noise of a neighbor’s television set, the noise

of airplanes and the noise in libraries, for example, are all noises that we feel entitled to complain about, that we feel that we should not have to put up with. However, there are other noises that are associated with the achievement of collective goods and the practices connected with the pursuit of reasonable conceptions of the good that we should put up with. Noises that are the by-product of the achievement of collective goods I will hereafter call 'necessary noise', and noise that is the result of the pursuit of 'reasonable' religious, cultural and social practices I will call 'reasonable noise'. The questions of justice that arise are different in the two cases and I will therefore treat them separately. One feature that connects them, though, is that they are both 'public noises' in contrast to 'private noises'. A public noise is one that affects a large and indefinite group or category of people; for example, the noise of a factory or an airport, or the noise of roadwork, are public noises in this sense since the noise affects entire neighborhoods and, for instance, pedestrians. An example of private noise is 'neighbor noise' that affects a particular person in his or her particular circumstances. The distinction is not sharp but it does track a distinction in British common law between statutory offences with respect to noise and civil offences caused by the nuisance of noise. In general, questions of justice are primarily focused on public noise. However, as we will see below, private noises can also be unjust when the victims of noise are likely to suffer an unfair burden of noise because of some 'justice-relevant' feature, such as poverty.

Before we move on it is important to touch on one further element in understanding what noise is. Sound, of course, is used to communicate and sometimes noise is defined as non-communicative sound. We are tempted to say of someone's speech, for example, that it is 'just noise' because we want to convey to them that they are speaking 'nonsense'. But this is a metaphorical use of the term 'noise' because in these cases something *is* communicated but the person who makes the remark that the speech is 'just noise' is actually disagreeing with or condemning what is being said. Speech (in a language one understands and even perhaps in a language one does not) is never 'just noise'. Unwanted speech is not unwanted sound because sound is not essential to speech and meaning, since what is communicated in speech can be communicated without sound (by writing, for example). However, we should distinguish this from the case in which a noise is *used* to communicate something. Here nothing is being said or communicated within (as it were) the sound but the sound is an instrument of communication. So, for example, the sound of a horn communicates something to a pedestrian who is danger. This noise is not speech, but it does communicate something. The noisiness of the sound is what does the communicating. Another example is when protesters bang on something to make a noise as a way of indicating their disapproval. Here again noise is used to communi-

cate, as the driver of a car uses the horn to communicate danger to the pedestrian.

Sometimes noise is used to prevent communication, as when an audience jeers loudly to prevent a speaker being heard. This is, of course, a free speech issue. I want to avoid becoming embroiled in free speech debates because, of course, noise is just one way a person's speech may be prevented (someone can unplug the microphone and achieve the same effect). Here the issue is the rights of the person whose speech is being denied.⁷ However, as I have said, in this paper I am concerned with how the burden of noise is distributed in society and not directly with free speech issues.

As we will notice later when I distinguish between reasonable and unreasonable noise, sometimes sound is noise for some people and communication for others. So, the ringing of church bells communicates a message to the members of a church, but to non-members this can be mere noise. Non-members might object to the noise of the bell ringing but not to the message (they would have no objection to church members being alerted to the start of a service) or they could object to the noise *because* of the message it conveys (if they are intolerant of believers). But in the latter case the noise is secondary since the objectors would object to an email message, for example, summoning members to church as much as they would the ringing of bells. When we move on to discuss reasonable and unreasonable noise I will focus on those cases where the objection to a practice is to the noise and not what the sound communicates to those who do not regard it as a mere noise. It is hard to draw sharp distinctions between noise and the communicative aspects of sound but in the following I hope to show that it is useful to do so.

Necessary noise

Noise shares some characteristics with other forms of 'pollution'. It invades an environment and is damaging and foreign to it. Pollution is bad for a number of reasons, among which are that it destroys or diminishes some good (some place of natural beauty or the health of a body of water, for instance), it harms people (through poisoning them or their food, for example), and it sometimes harms future persons. We tolerate pollution when it is a by-product of some important collective good (the production of energy, for example) and when the following counterfactual conditional statement holds true: if the good could be produced without the accompanying pollution it would, providing the cost of eliminating it was not so great that, on balance, the good produced would be outweighed. Noise is like other forms of pollution in these ways, except that noise does not affect future persons (at least, directly). However, it does diminish some good (the

good of quietness) and the counterfactual conditional statement should hold (except, as I will argue below, in the case of 'reasonable noise').

The environmental justice movement and much recent writing on the fairness of the distribution of environmental goods has alerted us to the many ways in which minority communities and poor communities suffer an unfair burden of environmental harm.⁸ While this literature makes a highly convincing case for this conclusion the philosophical premises on which these justice claims are made seem to me to be under-theorized.⁹ Furthermore, as far as I know, the general problem of noise is not one of the topics taken up in this literature, except for a recent paper establishing the disproportionate noise burden that a largely poor Hispanic community suffered from activities at a local airport (Sobotta, Campbell & Owens 2007). But, once again, establishing the fact of a disproportionate burden is only the first step in arguing for its injustice.

Necessary noise, then, is the noise necessary to realize some collective, public good. Obviously, 'necessary' here denotes the amount of noise required to bring about the collective good and *no more*. The measure of necessary noise will be the least amount of noise required to bring about the collective good in question. Necessary noise can thus be defined as 'unwanted but necessary sound'. Now, it would be easy to leave the argument right here and claim that, provided the good in question outweighs the bad consequences of the noise, necessary noise is just noise. This would be a straightforward consequentialist argument that merely summed utilities and subtracted disutilities. However, I think that the question of justice requires that we look also at the *distribution* of the burden of noise as well as how noise affects citizens' rights, freedoms and capacities. Once we do this, then more interesting and challenging questions arise. It would be useful to begin here with an example.

Airport activities are a significant source of public noise. In most countries regulations control the numbers of take-offs and landings, the time of day that these occur as well as the type of aircraft that can be used. Nonetheless, noise continues to be a burden to those who live near airports and along the route of flight paths. Airport noise is comparable to other transport noise (cars and trains) and also to industrial noises from factories and construction noises. I assume here that such transport activities constitute a collective good and so fall into the category of unwanted but necessary sounds.

A recent large study that pooled data from three countries has shown that exposure to aircraft and traffic noise significantly affects school children's reading comprehension abilities. The research concluded that the '[F]indings were consistent across the three countries, which varied with respect to a range of socioeconomic and environmental variables, thus offering robust evidence of a direct exposure-effect relation between aircraft

noise and reading comprehension.’ (Clark et al. 2006:36). This finding is important because it clearly demonstrates that the children in this study bore the burden of public noise required for the realization of the collective good that air transportation provides.¹⁰ This also provides grounds for agreeing that the nature of the distribution of the burden is important when assessing the question of whether such a burden is just.

What is required at this point in the argument is some account of injustice. As I mentioned earlier, I am not going to offer an argument against interpreting injustice as disutility and then weigh the disutility of noise burdens (including the disutility of distributional effects) against the utility of the associated collective good. Instead I am going to apply a liberal standard that, I believe, better captures the requirements of justice and, when applied to particular cases, better captures our intuitions.¹¹ Liberals such as Rawls privilege rights and freedoms over utility maximization. Therefore, rights serve as ‘side-constraints’ in the pursuit of the good. More recent work has focused not only on rights and freedoms but also on citizens’ capacities to exercise those freedoms and rights. On this account, someone is harmed when their basic rights and freedoms are threatened or the exercise of these rights and freedoms are unfairly obstructed, or when their capacity to develop or exercise these rights and freedoms is diminished.¹² Rights and freedoms specify, in an abstract fashion, the benefits of citizenship. The diminishment of these rights and freedoms thus increases, unfairly, the burden of social cooperation and for this reason such a diminishment is *prima facie* unjust. The diminishment of a citizen’s capacity to exercise his or her rights and freedoms needs to be significant and systematic to count as unjust. Furthermore, this diminishment must be either caused by the activities of public institutions or amenable to remedy by public institutions.

The argument thus states that a noise is unjust when it harms someone in the liberal sense specified above. The study of the effects of noise on reading comprehension among children mentioned earlier is therefore a clear instance in which an argument can be made that the burden of noise that these children suffer is unjust. It is precisely their capacities for equal citizenship that are threatened by the airport noise they are burdened with. The harm is significant since it affects their long-term life prospects, and it is systematic because it is regular in its occurrence and connected to a planned, long-term and purposeful activity, and it is institutional, that is, connected to the activities of one of the major institutions in society (the activities of the market). Since public institutions regulate noise and also since they have the means for ameliorating or compensating for the effects of noise, the noise burden that the children suffer meets all the criteria of an injustice. The state therefore has a *prima facie* duty to act to prevent such an injustice.

The significance of this conclusion is that it identifies noise in this case as being more than a mere nuisance. Although there is reason to control and prevent the nuisance of noise, and most towns and cities do regulate noise as a nuisance, the normative claim of an injustice is much more urgent than the claim of a nuisance. So, while the airport noise in the example lies below the threshold of an immoral use of noise, it does however constitute an injustice and not a mere nuisance. We can conclude this section by saying that some people bear an unjust burden of public noise *even when* such noise is necessary noise in the sense defined above; the good that necessary noise is associated with does not cancel out claims of justice.

Private noise

The most prevalent and most complained about private noise is ‘neighbor noise’. Private noise is not usually significant, systematic or institutional, and its sufferers are particular persons rather than general categories of persons or the public at large. Private noises are ‘annoyances’ rather than threats to our rights and freedoms. This is not to say that a neighbor, for example, could not use noise to curtail someone’s rights, but the class of noises I am concerned with here would normally be classified as nuisances and annoyances by law rather than as crimes. When one suffers the annoyance of the noise of a neighbor’s television there is no injustice committed. However, private noises can be classified as unjust if those who suffer the burden of them do so because they share some ‘justice-relevant’ feature. The following case will serve to illustrate this point. According to data from the American Housing Survey,

low-income residents are nearly twice as likely (9.1%) to report that neighborhood noise is bothersome in comparison to families not in poverty (5.9%). A nationwide survey of major U.S. metropolitan areas found a strong, adverse correlation ... between household income and 24-h average sound level exposures. Households with incomes below \$10,000 had average sound exposure levels more than 10 dBA higher than households above \$20,000 annual income. (Evans & Kantrowitz 2002: 308)

The study concluded that ‘Income is often directly related to environmental quality, especially when low-income samples are contrasted with samples that are not poor,’ and that ‘environmental quality is inversely related to multiple physical and psychological health outcomes.’¹³

It is possible to argue in this instance that the private noises that low-income citizens suffer rise to the level of an injustice since the noise burden is directly correlated with income.¹⁴ Income is what Rawls calls a primary good, one of the basic measures of how benefits and burdens are distributed

in society. A lack of income can be an injustice in two ways: Firstly, (following Rawls) the distribution of income can be unfair because it violates the difference principle. And, secondly, a distribution of income can be unjust if it affects the 'worth of liberty' for some citizens, that is, their capacity for exercising their rights and freedoms.¹⁵ It is thus plausible to argue that where citizens suffer a greater burden of private noise *because* of their relative lack of income and, where this poverty is itself an injustice, then the consequences of that poverty (suffering higher levels of private noise) is also an injustice. Similarly, whereas hunger itself is not an injustice (it may be a misfortune), hunger that is a result of an injustice is also unjust. This is an indirect argument for the injustice of private noise and so we can conclude that private noise can be indirectly unjust.

Reasonable noise

All the noises we have considered so far are ones that we would eliminate if possible; they are sounds that are unwanted. Aircraft that make no noise and quiet neighbors, for example, are both desirable from everyone's point of view. However, there are some sounds that are wanted by some but not by others. Neighbor noise is a clear enough example of this. Some sounds and noises, though, are associated with social, cultural and religious practices that have a claim to a different standard than annoying private noises and which also have a different claim to justice than necessary noise. Here, I have in mind the sounds of church bells, calls to prayer, and music and rituals that form part of the practice of a particular way of life for some citizens in a democratic society. The question of what attitude to adopt towards these kinds of noises is particularly pressing in pluralistic societies where groups of citizens pursue different conceptions of the good. The sounds associated with these practices are clearly wanted by the practitioners and, furthermore, are often essential to the realization of the good that they pursue. On the other hand, for those citizens who have a different conception of the good, these sounds are often perceived as noise. I want to argue that these noises, that I will call 'reasonable noises', are different from private noises. Secondly, I will argue that justice requires that we should be maximally tolerant of such noises because they are reasonable. One way reasonable noise differs from necessary noise is that reasonable noise is essential to the good aimed at and so the counterfactual that applies to necessary noise (that if the good could be realized without the noise it would) does not apply to reasonable noise. In the remaining part of this article I argue that reasonable noise is just noise. I will end with a brief consideration of how we might treat instances of unreasonable noise.

Rawls distinguishes between reasonable and unreasonable comprehensive doctrines. A comprehensive doctrine is a more or less coherent assemblage of moral, religious and metaphysical beliefs that form a conception of the good. The idea of reasonableness specifies those comprehensive doctrines that form part of an agreement on the principles of justice that govern the basic institutions of a democratic society. In other words, those comprehensive doctrines that (for their own reasons) assent to, and affirm the foundational political ideas of a democratic society are 'reasonable'. The major religions, cultural, political and ideological movements in society constitute such comprehensive doctrines (e.g. Catholic, Marxist, liberal, existentialist, etc.).¹⁶

Now, given a plurality of such doctrines that overlap in their agreement on the basic principles of justice, it should be obvious that what is sound to some people will be noise to others when citizens engage in the activities associated with their reasonable comprehensive doctrines. How are we to regard these noises? We should assume that they are not immoral, of course, and also that they are not harmful in a way specified earlier that would make them unjust; that is, that they do not diminish the rights and freedoms of citizens in significant, systematic and institutional ways. That would seem to leave us with only the option of regarding these noises as private noises and to classify them as nuisances. However, I think there are good liberal and democratic reasons for arguing that such noises deserve a higher level of toleration from citizens in a pluralistic democratic state.

The reasons why citizens should accept the additional burden of reasonable noise are the following: Firstly, reasonable comprehensive doctrines, and the practices and activities that accompany them, are essential to the stability of democratic societies. It is these doctrines that form the ideological foundation for citizens' support of the principles that govern the basic institutions of their society. While all agree, ideally, with these principles of liberty and fairness, their reasons for doing so are anchored in their respective comprehensive doctrines. It is therefore important that these doctrines flourish. Secondly, citizens' sense of their own worth and their capacity to engage with society as a whole also rests, in large part, on the resources they acquire from their communities. Now, community identity and comprehensive doctrines do not, and should not, track each other; citizens who have different conceptions of the good come together to form communities. However, the broadly moral character of these communities (insofar as they are not mere *modus vivendi* arrangements) rests on the comprehensive doctrines that citizens subscribe to. Finally, the rituals, practices and activities associated with comprehensive doctrines are essential to their existence. Comprehensive doctrines are evolving and changing, of course, but also have histories and traditions that help engage citizens in the ideological structures that support them. Taken together, these considerations provide,

I think, grounds for treating noise connected with reasonable comprehensive doctrines differently from mere private noise. It is precisely the importance of reasonable comprehensive doctrines to the stability of democratic society and to the flourishing of democratic citizens that we should treat reasonable noise as public noise and apply a different standard. The first two reasons set out in this paragraph do not apply to unreasonable comprehensive doctrines since they, by definition, do not sustain or support the principles of justice on which a liberal democratic society stands. Below, I will consider what our response should be to unreasonable noise.

I will look at two examples which I will argue can be considered reasonable noise and hence that each has a higher claim to our toleration. Here is the first example:

St. John's, a Catholic church in south Reston, installed a \$50,000 electronic bell system in 2004 as part of a major expansion. When the bells began ringing, in three-minute bursts – three times on weekdays, once on Saturdays and before each of five Sunday Masses, starting at 7:30 a.m. – neighbors complained. The county discovered that the bells registered at an average of 75 decibels (roughly equivalent to a vacuum cleaner at close range), which is considerably above the 55-decibel limit in residential areas. The church reduced the power flowing to the three bells, which brought the reading down to 60 decibels, softer (about the sound of an air conditioner at 50 feet) but still above the limit. The dispute has kept the bells silent for 23 months. (*Washington Post*, December 6, 2006)

Now clearly, the authorities here are applying standards that apply to private noises that are nuisances. What is not in dispute is whether the noise is annoying to those who do not share the comprehensive doctrine of the Catholic Church; it clearly is. What is in question, though, is whether the burden of this annoyance should be borne by citizens.

To begin with, we need to note that there is a difference between saying that a noise is candidate for toleration and saying that *any* amount of noise that is 'reasonable' should be tolerated. So what are the criteria for a tolerable amount of reasonable noise? Firstly, one mark of reasonableness is that reasonable citizens are willing to engage with and compromise with one another, and that they generally abide by the agreements they make. In the example above, the church did in fact attempt to reach a compromise with local citizens and, furthermore, although 60 decibels is noticeably louder than 55 decibels (since sound is measured on a logarithmic scale), it is considerably less than 75 decibels. Secondly, the kind of noise is important when making judgments about reasonable noise. As we have seen, the loudness and the frequency of the noise (pure tones being more annoying, for example) as well as how often and at what time of day the noise is made and also the background environment are all important. One would also need to be persuaded that the particular noise in question is essential to the practice. This judgment would have to be made from within the perspective

of the comprehensive doctrine and its history and traditions. While it might be as efficient—for instance, to email members of the congregation to remind them of a church service—the tradition of bell ringing is a clearly established part of Catholic Church ritual (see e.g. Malz 1985).

We can summarize the discussion by setting out four requirements of the Test of Reasonable Noise:

- 1 The noisy practice is connected with a reasonable comprehensive doctrine.
- 2 The practice is part of the history and traditions of that doctrine.
- 3 The practice is essential to the activity (as judged from within the perspective of that doctrine).
- 4 The reasonableness of the practitioners is evident in attempts to meet the concerns of other citizens.

We should note, however, that a noise that meets the test of reasonableness gives us only a *prima facie* reason to tolerate it. A noise that constituted a ‘major nuisance’ would cancel such a *prima facie* reason. It is tricky, of course, to say what a ‘major nuisance’ is, but hours of deafening bell ringing, for instance, probably counts as a major nuisance. So, reasonable noise should trump the nuisance of private noise all along the scale except at the top end. This is to say that at some high level private noises trump reasonable noises, although at lower levels reasonable noises trump private noises. (This perhaps requires a worked-out ‘phenomenology of annoyance’ and an argument to show the real harm of a great annoyance.)

The woolliness of the above claim shows that each case will, of course, be judged differently, but the point I am trying to establish here is that we should accept a higher burden of noise when the source of that noise is the activities associated with a reasonable comprehensive doctrine. The example given above seems to me to be just such a case. Finally, research has shown that people are less annoyed and more tolerant of noise when they understand *why* the noise is being made (study quoted in Langdon 1985: 152). People who received a regular circular explaining the activities of the local airport reported less annoyance than those did not receive the circulars. This suggests that public education about religious and cultural practices of others is important in ameliorating the annoyance of reasonable noise.¹⁷

The second example of a reasonable noise is one that is an *indirect* result of the activities associated with a reasonable comprehensive doctrine:

The Sri Venkateswara Hindu temple in Bridgewater ‘wants to build a cultural center more than double the size of its 9,800-square-foot building, which sits in front of the main temple building. The center is used for activities like language classes and dance, and temple leaders argue that it lacks sufficient space for costume changes,

seating and dining ... Residents opposed to expansion of the complex have cited a range of concerns, including increased traffic on busy Route 202/206 and its residential tributaries, and the potential for diminished property values. The neighborhood concern is traffic, noise pollution, light pollution,' said Suzanne Merten, a resident who attended most of the hearings. (*New York Times*, June 2006)

The noise of concern here does not come from the cultural practices themselves but from the activities that make those practices possible, such as traffic noise. Again, I would argue here that, insofar as such noise is essential to the practice, the noise is reasonable and consequently has special claim to citizens' forbearance. Once again, though, the reasonableness of practitioners is important and in the case of noise associated indirectly with the practices of reasonable comprehensive doctrines there are obviously more alternatives; after all, it is not part of the history and traditions of Hinduism that worshipers arrive at temple in SUVs. Therefore democratic citizens have an obligation to accept a greater burden of the noise associated with reasonable comprehensive doctrines, both noises directly associated with it and noises indirectly associated it.

Unreasonable noise

Finally, I will turn briefly to the matter of unreasonable noises. Protestant marches in Catholic neighborhoods in Northern Ireland are very noisy and the noise is an act of deliberate intimidation. The sectarian character of the Protestant 'Orange Order' makes it unreasonable and thus citizens in a democratic society have no reason to distinguish this noise from private noise and thus have no reason to accept the burdens of this noise. Similar considerations apply to neo-Nazi marches in Jewish neighborhoods, such as the notorious neo-Nazi march in Skokie, Illinois. Setting aside other considerations such as the affect of these acts of intimidation of the freedoms, rights and capacities of their targets, we should apply the same noise standards to these marches as we would to someone playing loud music in his or her backyard and thus regard this noise not as reasonable, but as a nuisance. So, unreasonable noise is noise that has no special normative claim on our toleration and forbearance. Unreasonable noise is obviously not necessary noise since it is not connected to the realization of a collective good and thus it can only be regarded as private noise and subject to those standards.

Conclusion

I have argued that necessary noise can be unjust if it fails to meet the liberal standard of justice I have set out above. I have also argued that private noise can be unjust if citizens suffer it because of some 'justice-relevant' characteristic. Finally, I have argued that we should accept a higher burden of noise if that noise is connected to the practices and activities of a reasonable comprehensive doctrine.¹⁸

Notes

- 1 For example, Schopenhauer's (1917) essay 'On Noise' is primarily a long complaint about the use of whips. He writes 'The most inexcusable and disgraceful of all noises is the cracking of whips – a truly infernal thing when it is done in the narrow resounding streets of a town. I denounce it as making a peaceful life impossible; it puts an end to all quiet thought.'
- 2 There are numerous definitions of noise although little general agreement on the central defining ideas. For example, noise is defined as 'a number of tonal components disagreeable to man and intolerable to him because of the discomfort, fatigue, agitation and, in some cases, pain it causes,' in the *Environment Programme 1977–1981. Commission of the European Communities*, 1976, and 'Sound which is undesired by the recipient,' *Noise, Final Report of the Committee on the Problem of Noise*, 1963, both quoted in Penn (1995: 1). The City of New York noise ordinance defines 'unreasonable noise' as '... any excessive or unusually loud sound that disturbs the peace, comfort or repose of a reasonable person of normal sensitivities or injures or endangers the health or safety of a reasonable person of normal sensitivities or which causes injury to plant or animal life, or damage to property or business.'
- 3 For example, a recent Human Rights Watch report states that noise is used by US forces in Iraq as a method of interrogation that clearly constitutes torture (<http://hrw.org/campaigns/torture.htm>).
- 4 The distinction between what is immoral and what is unjust is not easy to make clear. Broadly, I want to say that the problem of justice concerns harms that arise from the workings of institutions that are significant, systematic and remediable by institutions. I will say more about these criteria later. So an injustice may occur, and usually does occur, even when no one in particular is responsible for the injustice and when no one has intentionally caused or set about causing the harm in question. Morality, on the other hand, does have to do with intentions and assigning blame to particular individuals for their actions and inactions that result from such intentions. The complexities of these distinctions are evident in the torture example offered above. Insofar as the torture was a renegade action of an individual rather than an act of someone fulfilling a particular institutional role which authorized (directly or indirectly) the act of torture, then that torture is a problem of morality rather than of justice. From the point of view of the victim of course these distinctions are immaterial.
- 5 People differ in their sensitivity to noise along age, gender and cultural dimensions. Langdon (1985) discusses these differences in relation to methods for measuring levels of annoyance caused by exposure to noise.
- 6 While individual variations in noise tolerance obviously matter when considering the burden of noise for those individuals, from the point of view of justice these varia-

tions need to be collated into a form that allows for the state to design and enact policies to address injustices. Hypersensitivity to noise, for example, should be regarded as a misfortune rather than as an injustice.

- 7 Clearly in this case the use of noise results in an injustice by denying a person his or her right to speak. However, although noise is often a particularly efficient way of denying a person their right to speak there is nothing special about noise as such in denying the right of free speech. As I have said, speech can be prevented in many other ways that have nothing to do with noise.
- 8 For an overview of the environmental justice movement and some theoretical issues see, for example, Pellow and Brulle (2005) and Pellow (2000). The environmental justice movement in the United States has been more of an activist movement than an attempt to establish a normative theoretical paradigm. However, recent work on the role of human rights in environmental justice is an example of how theoretical work is catching up with the activists. See, for example, Haywood (2005) and Woods (2006).
- 9 A view that Bartlet and Barber (2005: 222) agree with when they write that ‘What has been missing has been any sort of philosophical grounding in terms of governance or democratic theory, thus muting [environmentalism’s] appeal as a policy strategy.’
- 10 Evans and Kantrowitz (2002) cite a study that clearly demonstrates a correlation between poverty and noise exposure, as illustrated in the table below which they adapted from Haines, Stansfeld, Head, and Job (2002), where ‘Leq’ means Equivalent Continuous Noise Level over a specified period:

Aircraft noise exposure and elementary school poverty index

	Low noise	Moderate noise	High noise
	<57 Leq	57–63 Leq	64–72 Leq
% Eligible for free lunch	14	23	28

- 11 The issue of the capacity of liberalism to seriously address environmental questions has been raised in a number of works, especially for contractarian liberals such as Rawls. More specifically, some recent works have examined the extent to which Rawls’s political philosophy is useful for grounding environmental claims. While Rawls himself thinks environmental issues can have only an indirect claim on our concerns about justice (Rawls (1993: 214), others have argued that Rawls’s theory of justice has the resources to address environmental concerns directly. See, for example, Singer (1988), Hailwood (1999), Preston (2004), Valdivielso (2004), Bartlet and Barber (2005). I am not engaging in this debate in this paper, preferring instead to tackle the problem of noise and justice directly and *assuming* a particular normative background. This strategy has the advantage of forcing us to confront the policy and political issues rather than postponing these issues while the philosophical problems are resolved, if they ever are. Of course, if a reader disagrees with the assumed liberal framework then the arguments that follow will be less than convincing.
- 12 For the purposes of this paper I will take Rawls’s account of political rights and freedoms as an appropriate standard. For a statement of what such rights and freedoms include see Rawls (1999: 53).
- 13 For an account of the various effects of noise on health, task performance and motivation see Evans and Kantrowitz, (2002: 320) (and the references contained therein).
- 14 Of course, this correlation does not establish a causal relation between the burden of noise and poverty in the very strongest sense of causal. However, when other possible factors are controlled for the relation is clearly enough established to make a claim for injustice.

- 15 The point I am making here is a general one, that by whatever standard of justice one chooses, if someone suffers a greater burden of noise as a consequence of a violation of that standard, then the burden is unjust. I use Rawls's difference principle (Rawls 1999: 266) and the notion of the 'worth of liberty' (Rawls 1999: 197ff) to illustrate this general point.
- 16 Rawls (1993: 50) defines reasonable persons as those who are 'ready to propose principles and standards as fair terms of cooperation and to abide by them willingly, given the assurance that others will likewise do so.' He defines unreasonable persons as those who 'plan to engage in cooperative schemes but are unwilling to honor, or even to propose, except as a necessary public pretense, any general principles or standards for specifying fair terms of cooperation. They are ready to violate such terms as suits their interests when circumstances allow' (1993: 50).
- 17 This also might explain why people are seemingly less tolerant of religious practices that are 'foreign' to their background culture. For example, the sound of Muslim calls to prayer may be less tolerated in Western communities precisely because there is less knowledge about the religious and cultural practices of the Muslim faith.
- 18 I would like to thank the audience at the 2007 Philosophical Society of Southern Africa meeting at Stellenbosch University and the audience at the 2007 North American Society for Social Philosophy at Millersville University for their useful comments. I would also like to thank Ron Cohen and Patrick Hayden for their discussion and suggestions.

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