

HIGHWAYS TO SILENCE REVISITED: A HISTORY OF DISCOURSE COALITIONS AROUND TRAFFIC NOISE

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ABSTRACT: During the Covid-19 pandemic, the density of road traffic in the Global North decreased considerably. For those enjoying the resulting tranquillity, it prompted the hope that this experience would raise public noise awareness and alter mobility culture. Now that Global North economies are returning to pre-pandemic levels, however, not much appears to have changed. This article aims to contribute to understanding the persistence of the status quo by historically tracing discourse coalitions around traffic noise in the twentieth and early twenty-first century. Discourse coalitions are connections between groups of actors that have opposing interests but share a specific set of storylines concerning a public problem. As we will show by focusing on the issue of traffic noise in the Netherlands, the long-term results of these discourse coalitions—in terms of discourse structuration, institutionalization and destabilization—tend to shift attention away from structural interventions in traffic flows.

KEYWORDS: Traffic noise, pandemic tranquillity, discourse coalitions, discourse structuration and institutionalization, the Netherlands

REVISITANDO AUTOPISTAS HACIA EL SILENCIO: UNA HISTORIA DE LAS COALICIONES DISCURSIVAS SOBRE EL RUIDO DEL TRÁFICO

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RESUMEN: Durante la pandemia de la Covid-19, la densidad del tráfico rodado en el Norte Global se redujo considerablemente. A aquellos que disfrutaban de la tranquilidad resultante, se les despertó la esperanza de que esta experiencia aumentara la conciencia pública sobre el ruido y alterara la cultura de la movilidad. Sin embargo, no parece que mucho haya cambiado ahora que las economías del Norte Global están retornando a niveles pre-pandémicos. Este artículo pretende contribuir a la comprensión de la persistencia del status quo trazando históricamente las coaliciones discursivas sobre el ruido del tráfico en el siglo XX y principios del siglo XXI. Las coaliciones discursivas son conexiones entre grupos de actores que tienen intereses opuestos pero comparten un conjunto específico de narrativas relativas a un problema público. Como mostraremos a través del caso del ruido de tráfico en los Países Bajos, los resultados a largo plazo de estas coaliciones discursivas—en términos de estructuración, institucionalización y desestabilización del discurso—tienden a desviar la atención sobre las intervenciones estructurales en los flujos de tráfico.

PALABRAS CLAVE: Ruido de tráfico, tranquilidad en pandemia, coaliciones discursivas, estructuración e institucionalización del discurso, Países Bajos.

INTRODUCTION: CAPTURING QUIETUDE

On April 26, 2020, the audio recordist Arnoud Traa made it onto the six o'clock news in the Netherlands. The television clip showed him biking through the Amsterdam city centre, stopping every now and then to make a calibrated binaural recording of the pandemic quietude during the lockdown. Dam Square was one of his stops, and Traa noted that he could hear sounds at greater distances than during pre-Corona times, with children rather than tourists audible (de Wiel, 2020; De nieuwe stilte, 2020). Some eight years earlier, he had made recordings for a project that compared simulations of the Dam Square soundscapes of 1895 and 1935 with a contemporary recording of the same place in 2012 (Bijsterveld, 2015). The differences between the 2012 and 2020 recordings were striking. The 2012 recording carried a multitude of overlapping sounds—including those of motorized traffic—while the 2020 recording displayed softer sound sources that were also more distinct. It sounded like a village (Dallinga, 2020).

Measurements in Bochum (Germany) pre- and during the lockdown of March 2020, showed an overall noise level reduction of 5,1 dB, a significant change—given that measurements in dB imply the use of an algorithmic scale—that was similar to the reduction recorded in several other European cities (Hornberg *et al.*, 2021). Such lower levels of noise actually prompted Beeld en Geluid, a Dutch centre for media heritage, to commission Traa to document the changes in the Amsterdam soundscape described above. During the lockdowns, many urban residents stayed at home, often resulting in more attentive listening. Nelly Oudshoorn, a scholar in science and technology studies (STS) who took up composing alongside her academic work, captured the experience of the changing Amsterdam soundscape in a musical work. «Crowded cities» the CD liner notes on the composition state,

«are not the ideal place for listening to birds, because traffic noise often overpowers their songs. During the first lockdown due to the Covid-19 pandemic in Spring 2020, this hierarchy of sounds changed drastically: suddenly, we could hear the birds very clearly! This piece begins with the city sounds we used to hear before the lockdown. In the second half of the piece, I tried to represent the city sounds during the lockdown» (Oudshoorn, 2022, n.p.) [City Sounds-25-10-2022-09.36.mp3](#).

The shifts in the soundscapes of the Global North elicited news items about the change itself and the recording initiatives to register it. Some of the people interviewed assessed the silence as unsettling and threatening -- signifying the many deaths, loss of jobs and subdued social interaction resulting from the pandemic. Many people, however, expressed appreciation of the quietude—or the reduction of particular forms of sound such as aircraft noise—describing it as one of the unexpected beneficial effects of an otherwise horrific pandemic (Cardoso, n.d.; Dallinga, 2020; Dijksterhuis, 2020; Egmond, 2020; Givhan, 2020; Sims, 2020).

Nonetheless, traffic density soon returned to pre-pandemic levels once the lockdowns had been lifted. In the Netherlands, traffic jams became rather common again, as did traffic noise. In fact, a recent study still identifies traffic noise as «the main source of environmental noise in European cities», with environmental noise defined as «all unwanted and harmful outdoor sound from human activities», and an estimated median of «42% of the adult population [...] exposed to road traffic noise levels that are harmful to health» (Khomenko *et al.*, 2022, pp. 2, 1, 11). This is all the more remarkable as attempts to control traffic and transport noise, as we will show below, go back to at least the late nineteenth century. The data above, however, suggest that road traffic noise is a rather persistent problem.

This article aims to contribute to understanding this persistence by tracing the history of discourse coalitions around road traffic noise, including highway noise, in the twentieth and early twenty-first century. Discourse coalitions are connections between groups of actors that have opposing interests but share a specific set of storylines concerning a public problem. We will focus on three discourse coalitions concerning traffic noise in the Netherlands, a densely populated country with a heavily used highway infrastructure. We will do so by drawing on a meta-analysis of our own and other scholars' work and centring on the most predominant discourse coalitions around traffic noise. Although our history is not exhaustive, and does not cover all past traffic noise control initiatives, we will show how the discourse coalitions discussed, and especially their long-term results, tended to shift attention away from structural interventions in traffic flows. Before we further introduce our case studies, however, let us first unpack and contextualize the notion of discourse coalition in order to explain how we apply it to the history of highway noise.

DISCOURSE COALITIONS

In policy studies, the formation of coalitions has received due attention as part of a wider interest in the interpretative and argumentative nature of policy processes. The so-called «argumentative turn» in policy studies points to the constitutive role of language in public policy and studies processes of argumentation, rhetoric and communication (Fischer and Forester, 1993; Fischer and Gottweis, 2012). In such processes, particular networks or coalitions may emerge between disperse groupings around a policy problem, further articulating policy problems and operating as vehicles for policy solutions.

Such coalitions have primarily been studied according to two approaches: the advocacy coalition approach (Jenkins-Smith and Sabatier, 1994; Sabatier, 1998) and the discourse coalition approach (Hajer, 1995; Lees 2004). The basic idea of the first approach is that members of an advocacy coalition «share a set of normative and causal beliefs and [...] sometimes act in concert» (Jenkins-Smith and Sabatier, 1994, p. 103). The advocacy coalitions approach studies the alignment of heterogeneous groupings according to a common interest and a shared goal, for instance in the case of environmental policies (Hysing and Olsson, 2008). The discourse coalitions approach, on the other hand, stresses that interests and worldviews are not necessarily aligned. Instead, joint actions in a discourse coalition are derived from common sets of storylines and discursive strategies that eventually solidify, or institutionalize, into organizational practices (Hajer, 1993, 1995; Lees, 2004). According to Maarten Hajer (1995), the two crucial steps here are «discourse structuration» –alignment of discursive strategies– and «discourse institutionalisation» alignment of practices. The formation and efficacy of discourse coalitions have been studied in particular for energy and climate policies (Bulkeley, 2000; Mander, 2008; Jessup 2010; Cotton, Rattle, and van Alsteine, 2014). These empirical studies show that discourse coalitions may facilitate potential breakthroughs in policy problems in the case of enduring public problems.

Discourse coalitions thus seem to provide alternatives to top-down policymaking and promise novel pathways to policy solutions. Hence, it is clear why they have received so much attention in the policy studies. For instance, in *Governance of Problems* (2011), Robert Hoppe studies how discourse coalitions, as examples of spontaneously formed networks, may bring about solutions through discursive practices. Discourse coalitions are fortified by means of shared terms and concepts, united in overarching storylines. These may emerge when political and policy actors who are on «both sides of an issue, usually after long stretches of bitter combat and controversy, come to realise that their predicament may end in serious, potentially harmful conflict» (Hoppe, 2011, p. 139). Hoppe also notes that discourse coalitions often need to be moved out of the political spotlight and insulated from normal political processes «where accountability is measured in terms of consistency with previous positions, not creativity and ingenuity in coming to new insights and agreement» (Hoppe, 2011, p. 140). The outcomes are often diverse: discourse coalitions may offer radical and innovative solutions in some cases, but only incremental or symbolic solutions in others. In the worst case, discourse coalitions fail to come to any solution, likely leading to enduring non-decisions and continuing controversies. Hoppe does not give clear indications as to why discourse coalitions may ultimately fail to bring about lasting solutions.

A central discussion in policy literature is about the way in which discourse as such can be powerful in political solutions. In their review of studies of discourse analysis in environmental politics, Hajer and Versteeg (2005) point to two basic approaches –Habermasian and Foucaultian– toward the power of discourse in policy studies. According to Jürgen Habermas, discourse is a vehicle for rational societal solutions, provided that the discursive debate is guided by practical rules to ensure fair and impartial contributions by all participants. So «discourse in the Habermasian sense has an explicit normative character and could thus provide a yard-stick of societal environmental debates» (Hajer and Versteeg, 2005, p. 181). Foucaultian approaches, on the other hand, are cautious about such expectations to solve societal problems discursively. Since power and knowledge are fundamentally intertwined –the key argument of Michel Foucault– discourse cannot do anything other than reinforce existing power differences. In this view, discourse is the vehicle of power and one can only hope to «trace the discursive power struggles underlying environmental politics» (Hajer and Versteeg, 2005, p. 181). The duality of discourse –both enabling and constraining routes for solutions– may then also be apparent in the ability of discourse coalitions to solve persistent public problems.

To complicate matters further, discourse coalitions may not remain stable over time. After the initial structuration (the acceptance of shared storylines) and institutionalization of a discourse coalition (the transformation

of these storylines into actual practices), it may experience a phase of destabilization. By drawing on discourse coalitions concerning road traffic noise, we aim to show that studying discourse structuration, institutionalization and destabilization in coalitions concerning traffic noise historically, across long stretches of time, enables us to understand how these coalitions shifted attention away from structural interventions in traffic flows.

We will examine three discourse coalitions concerning highway noise in the Netherlands. These include a discourse coalition between an automobile club and a society of acousticians initiating the Dutch «silence weeks» of the 1930s, another between a Dutch infrastructure authority and architects concerning sound barriers in the 1980s, and recent attempts by local authorities or public institutions to involve sound artists –and vice versa– in redesigning highway sound. In the first case, the discourse coalition focused on what acousticians now refer to as the source of noise, whereas the second and third cases focused on the transmission and reception of traffic noise. As we will show, all related practices were indeed adapted according to the discourse coalitions' logic, but left untouched or even fostered the flow of traffic itself, thus failing to tackle the very source of this public problem.

«ORDERLY TRAFFIC PROMOTES SILENCE»: A TRAGIC DISCOURSE COALITION

If there is any persistent environmental problem, it is noise. An issue raised since late antiquity and systematically discussed in the public domain since the late nineteenth century, it has never been resolved, while debates on its causes and solutions continue. With each new technology that produces sound not masked by the existing sonic environment, the discussion pops up again, often generating a debate that seems to be a remake of discourses concerning earlier technologies. Initially, those defining the noise problem often attribute unwanted sound to the so-called uncivilized behavior of groups of people in dire need of education. Subsequently, the disputed noise is either regulated by restricting it to temporal or spatial zones –allowing the sound to be heard only during the day, or only within particular areas– or abated in terms of the maximum levels of sound allowed. With sound generating technologies becoming more widely used, however, the sum of the sound levels may not, or only temporarily and in specific spots, be reduced, and the debates about the causes and solutions are reopened again (Bijsterveld, 2008).

A case in point is traffic noise. The history of this problem reveals a highly intriguing discourse coalition. In 1934, a group of scientists and engineers initiated the Dutch Sound Foundation, which aimed to both disseminate knowledge about sound and intervene in societal issues concerning sound. It initially hesitated, however, about which topic would be most appropriate for a public campaign. It certainly should be tangible enough to attract public attention. By chance, the foundation discovered that the Royal Dutch Automobile Club was planning to orchestrate silence weeks, during which traffic participants would be educated about conduct likely to reduce street noise. Cooperation with the automobile club offered a source of financial backing –a consideration that influenced the choice of traffic noise for the campaign (Bijsterveld, 2018).

In 1934, as well as in 1936, the Dutch Sound Foundation organized Anti-Noise Conferences in cooperation with the Royal Dutch Automobile Club. The foundation's chair, Adriaan Fokker, believed such conferences might contribute to a more «civilized» culture. To fight the «demon» of noise, he argued, one had to set out «the ideal of the expert professional who silently knew how to control their noiseless machine» against the «noise vulgarian» and «motor yokel» who tried to impress others by making noise (Verslag, 1934, p. 16). The despised sound of car horns, most contributors made clear, had to be eliminated first.

In line with these ideas, from 1935 to 1936, local noise abatement committees organized silence campaigns in Breda, The Hague, Rotterdam, Groningen and the province of Limburg, often cooperating with the police and motorist organizations. During «silence weeks», «silence months» and «silence exhibitions», campaigners distributed thousands of pamphlets. Dozens of newspaper articles, radio broadcasts, and at least one cinema newsreel covered the campaigns. The basic principle was to familiarize civilians with the idea that they must look before sounding their horns. Similarly, pedestrians and cyclists should learn to behave correctly: pedestrians should cross intersections in a straight line, children must play on sidewalks rather than the street and cyclists should stay on the right side of the road. In sum, people should watch out, stay right and slow down. In addition, they should fit exhaust mufflers and refrain from using their motor to test other people's eardrums.

One of the campaign's slogans, «Orderly Traffic Promotes Silence», typifies the unlikely discourse coalition between motorists and anti-noise activists. For the latter group, the key words were «promotes silence» while for the automobile club, they were «orderly traffic». This slogan, in fact, offered the club an opportunity to promote the automobile in general, since the orderly behavior of all traffic participants would, in the club's view, literally clear the road for the car. The slogan's dual meaning evoked both less congested streets –to the benefit of automobile owners– and a reduction of the exhausting chaos of sounds, reflecting the aim of noise activists. It merged two different, if not opposing, definitions of the street noise problem into one approach to noise, a true discourse structuration indeed (Bijsterveld, 2008, pp. 124–130).

According to local reports, the use of horns did, indeed, decline. In addition, Dutch traffic law was adapted in the late 1930s to ban the use of horns at night and to impose maximum sound levels on both horns and cars (Bijsterveld, 2008, pp. 131–132), thus allowing for a genuine discourse institutionalization. Yet rather than being eliminated, traffic noise only acquired a different sound color that consisted of far fewer horns but included a steady flow of vehicles with combustion engines. This discourse coalition had brought two unlikely partners together and was successful in reducing the noise of horns and disciplining the behavior of non-motorist road users; but it tragically promoted the car, thus failing to contribute to reducing environmental noise in terms of the levels of sound in decibel that increasingly became the way to measure the problem. In this destabilization phase (see table 1, first row), the increased traffic flow and redefinition of noise literally ended the initial coalition between automotive organizations and anti-noise activists, as in the 1960s, anti-noise activists acknowledged the problem of noisy –and gasoline-fueled– motorized traffic itself.

NOISE BARRIERS ASK FOR ARCHITECTURE: AN ABSORBING DISCOURSE COALITION

Washington D.C. most likely premiered the world's first earthen sound wall, in 1956. Yet by 2007, the Netherlands outdid the United States in terms of noise barrier density along its highways (Bijsterveld *et al.*, 2014, p. 112). Initially, the barriers were built in such a way –usually by contractors– to not only absorb and reflect highway noise, but to blend into the surrounding landscape through the use of climbing plants and camouflaging colors. Other ones were made to be as transparent as possible, by using plastic or glass. Either way, the idea was that the barriers be as invisible as possible, not only to minimize drivers' distractions but because sound barriers were highly unpopular as they blocked drivers' views.

From the late 1980s on, Rijkswaterstaat, the Dutch state agency in charge of building and maintaining highways in the Netherlands, established a discourse coalition with architects. While some architects had criticized Rijkswaterstaat for creating a forlorn, unsightly landscape with the construction of these barriers, others agreed to participate in the initiative. These architects were meant to ensure that highway design, including sound barriers, would represent a consistent highway identity and consider the perspective of the moving driver. Moreover, noise barriers should become markers of the invisible world behind them, reflecting the identities of towns and cities. This new take on sound barrier design resulted in a migrating-birds motif on some; the integration of retail shops in noise screens which seemed to move along with the motorist, in others; and an organ-like barrier consisting of vertically positioned tubes with high absorption qualities that drew its inspiration from an art sculpture in Madrid (Bijsterveld *et al.*, 2014).

Again, this discourse coalition merged very diverse interests and perspectives. For the architects, the noise barriers represented works of art, providing a new canvas to show their design skills while improving landscapes and road trips. For Rijkswaterstaat, it was a way to reduce the increase of highway noise without provoking public outcry over the barriers' ugliness. Moreover, by actually investing resources in well-designed noise barriers, a discourse institutionalization followed a discourse structuration.

Two crucial shifts accompanied this institutionalization, however. First, the storyline behind this discourse coalition silently transformed an auditory problem into a visual one. The long-term effects of a solution to highway noise –the high density of sound walls and their reputation as eyesores– triggered a redefinition of the problem from one sensory mode to another. Second, the two discourse coalition partners spoke *for* motorists and residents alike, thus absorbing a tension that is at the heart of many environmental problems: that the same person often contributes to *and* suffers from such problems. You may be a driver-commuter while hating highway noise in your garden. The elegantly designed results allowed motorists and residents to swallow the bitter pill of noise

barriers, while leaving the pressing problem of highway noise itself untouched. Here the destabilization phase (see table 1, second row) pushed both the sonic environment and the choices it might require out of view.

COMPOSING HIGHWAY SOUND: AN INDIVIDUALIZING DISCOURSE COALITION

A more recent approach to dealing with highway noise is the idea of transforming highway noise as unwanted sound into music or appealing sound. This trend is not limited to the Netherlands but reflects an international trend that draws on the work of the Canadian composer and environmentalist Raymond Murray Schafer. In the early 1970s, he claimed that mere noise control was too negative an approach, proposing that the public should be infused with a more positive awareness of the sonic environment and that sound design should lead to a «soundscape» better appreciated by urban dwellers (Schafer, 1977/1994, pp. 3–4).

Schafer's publications were widely read. Moreover, since the turn of the century, his ideas on urban sound design are increasingly materializing: municipalities, public institutions and soundscape artists have established a new discourse coalition, drawing on, but also slightly adapting, Schafer's ideals. Whereas Schafer promoted forms of urban design that would bring about an urban oasis of soft man-made sounds with a natural ring—like fountains or constructions that resounded raindrops—artists today also aim to transform environmental sound through mechanical installations or electronically amplified sound recordings.

One example is Emma Quayle's *Organ of Corti*, an instrument with transparent tubes that «recycles noise from the environment,» framing «the sounds already present ... in a new way» as well as challenging «expectations of what might constitute a piece of music» (SoundScape, 2011, p. 21). Another example, specifically addressing highway noise, is *Harmonic Bridge*, a 1998 sound installation by Bruce Odland and Sam Auinger commissioned by the Massachusetts Museum of Contemporary Art, where it was also exhibited. The piece transforms road noise from a nearby highway overpass «into a harmonic resonating sound intervention» by means of «tuning tubes» in the key of C, installed on the bridge that «generate living overtone series in real time and feed two cement cube speakers beneath the bridge» (Odland, 2011).

The idea behind these art works is to offer more rewarding soundscapes while simultaneously provoking a reconsideration of the sonic environment. Some sound studies and artistic research scholars, like Jordan Lacey and Marcel Cobussen, have argued that such works address the very act of listening. Instead of experiencing noise as a nuisance, urban listeners should be assisted in developing their listening habits so that they become *able* to hear something aesthetically pleasing in noise (Lacey, 2015; Cobussen, 2016). Increasingly, municipal authorities—with or without the mediation of arts institutions—have readily lent their ears to such approaches. In the Netherlands, for instance, the municipal authorities of Rotterdam collaborate with Cobussen on soundscaping as a form of auditory design that aims to improve the *experience* of sound rather than its mere sound levels, enabling both urban quiet and liveliness, although it is important to note that Rotterdam combines this with interventions such as redirecting traffic flows, expanding the bicycle infrastructure and using quiet asphalt (Gemeente Rotterdam, 2019). Local authorities and soundscape artist-activists thus increasingly find each other in an institutionalized discourse coalition that aims to heighten sonic awareness and alter sonic experiences by imbuing public space with commissioned compositions, sound installations and sonically enriched environments. This allows local authorities to intervene in soundscapes without necessarily needing to curtail transportation, while providing artists with potential commissions.

In fact, calls to involve artists in raising environmental awareness have become quite common. Some scholars strongly believe in the potential of art to enhance their audiences' experiential understanding of and attentiveness to environmental issues such as climate change. The sensory dimensions of audiovisual artworks have the potential to make climate change feel less abstract and distanced in time and space (Hawkins and Kanngieser, 2017). Collaborations between artists and scientists can, in their view, create «spaces of possibilities» for the «subversive imagination» necessary to cope with the fundamental complexity of environmental challenges (Kagan, 2015, pp. 1–2). Assisting audiences in imagining, engaging with and «actively living» environmental change, such as through music and poetry, is considered important for transformative climate change communication (Moser, 2019), which is in line with a wider investment in deliberative public engagement with climate change (Devaney *et al.*, 2020). Critical voices, however, are wary of «art washing»: artists merely helping corporate actors or authorities to unjustly acquire an environmentally friendly image rather than contributing to creative anticapitalist protest and sabotage to save the planet (Jordan, 2016).

Artistic intervention in social issues is also known as «artocracy», originally defined as a «pragmatic curatorial approach» aiming to «stir a renewed practice-led dialogue» between contemporary art and social communities (Zeiske, 2010, p. 9). This definition seems to assume that art curators should always take the initiative. Now that local authorities have also embraced art as a tool to address societal problems, however, we may redefine artocracy as a form of governance that delegates the solution of social problems –environmental or otherwise– to artists in the same manner as a technocracy mandates engineers to solve societal issues. In such forms of artocracy, authorities or artists may take the first step to initiate both communication about and actual intervention in social issues. Either way, artocracy often rests on discourse coalitions of some sort.

As the discourse coalition between artists and policymakers concerning traffic and highway noise is relatively new, we do not yet know how it will evolve over time. For now, however, it is already clear that it does at least three things: It facilitates interventions in public space that not only change the soundscape as such but also partially aim to encourage a new aesthetic evaluation of sound –to hear music in noise. It thus tends to hyper-individualize the noise problem, as it is the reception of sound –peoples’ modes of listening– that should change in tandem with the soundscape itself (table 1, third row). Finally, it allows highway traffic to remain as it is: to keep moving.

While the artistic interventions discussed above often endeavor to contribute to societal noise awareness, they hyper-individualize the problem of noise at the very same time. In contrast, «acoustic art» simply intends to *distract* urban dwellers from noise, thus explicitly accepting noise as part and parcel of everyday life –at least in some cases. As early as 1995, the acoustician and traffic noise expert Ulf Sandberg and the acoustic designer Takako Otsuka suggested adding sounds generally perceived as pleasant to noisy environments as a way of diverting the public’s attention from noise. Their key example was the Nishitsuruya-bashi bridge, or «whispering bridge», constructed in Yokohama, Japan, in 1998, its metallic tubes mimicking the sound of tinkling bells in response to vibrations caused by heavy traffic (Sandberg and Otsuka, 1995). Such forms of sound design alter the soundscape without claiming any effect on how society more fundamentally deals with traffic noise. In fact, Sandberg and Otsuka concede that traffic noise is, at times, a matter of fact.

«Although the authorities may have an ambitious program to reduce the noise, reality may force them to accept a normally unacceptable situation, particularly in outdoor spaces. In such virtually «hopeless» cases one may try to look for unconventional ways to reduce the nuisance» (Sandberg and Otsuka, 1995, p. 1).

Whichever approach these art initiatives take, they do not intervene in motorized mobility as such, even if soundscapes are enriched with sounds that may be considered more agreeable.

To summarize, the three discourse coalitions we have examined were successful at first sight; their success confirms the importance of the steps of discourse structuration and institutionalization in the build-up of a viable and effective coalition. However, we also found that the discourse coalitions of these initial solutions (T1) have not (yet) solved the highway noise problem in the long term (T2), as we have summarized in table 1.

Table 1. Discourse Coalitions around Highway Noise across Time.

Issue/Artefact	Discourse coalition and structuration	Discourse institutionalization T1	Discourse destabilization T2
Street noise/ car horns (Sound at source)	Motorists + noise abating experts: «Orderly Traffic Promotes Silence»	Disciplining car drivers, pedestrians and cyclists, thus reducing the use of horns on the street	Tragic: Increased traffic flow + <i>redefinition of noise problem</i> from sonic chaos to high sound levels
Highway noise/ noise barriers (Sound transmission)	National noise policy makers + architects: <i>Moving</i> noise barrier design reduces noise and fosters barrier acceptability	Reducing traffic noise for neighboring residents while allowing motorists to appreciate the landscape	Absorbing: <i>shifting the solution to noise</i> from the auditory to the visual domain, absorbing the tension between creating and suffering from noise
Highway noise/ noise <i>art</i> (Sound reception)	Local policy makers/public institutions + artists: aestheticizing noise as <i>music</i> reduces noise nuisance	Redesigning the traffic soundscape without having to adapt the traffic infrastructure	Hyper-individualizing: attempt to <i>redefine the perception and evaluation of noise</i> by the receiver, or to <i>distract</i> the receiver

Source: Own elaboration

CONCLUSIONS

Discourse coalitions can help govern thorny societal problems—at least in the short run. Our study of the history of discourse coalitions on traffic noise confirmed their initial success. However, in the long run, three tragic aspects stand out. The first is that the solution may elicit *new public problems*. As we have seen, noise barriers blocked noise but also blocked views. The solution then moved from the jurisdiction of acousticians to that of architects. These barriers addressed two opposing desires often united in a single person: the driver who desired to keep moving through an interesting landscape while complaining about the traffic noise in their own backyard. Yet it did not address the traffic flow itself.

The second aspect is that *problem definitions may shift*, which in due course may destabilize discourse coalitions. Remember how the reduction of horn use initially solved the problem of disorderly street noise. The concomitant streamlining of traffic flow, however, facilitated a rise in the volume—measured with the novel unit of the decibel—of motorized traffic. In this way, the definition of the public problem of noise changed from a problem of chaotic sounds, around which there was a discourse coalition, to a problem captured in terms of sound levels, a problem that did anything but disappear.

A third observation is that discourse coalitions do not necessarily emerge after explicit conflicts and contestation but may also *anticipate* them. The last case, for example, showed how municipalities and other authorities readily embraced the recent artistic redefinition of noise as music and the idea of *enriching* soundscapes rather than merely reducing sound levels, lending hope to the problem's smooth dissolution. This absence of prior contestation points to a silent depoliticization of the problem at hand, at least partially. Yet while artists usually see themselves as critical outsiders questioning societal structures and ontologies, the hyper-individualization of noise by some of them embodies the danger of contributing to the problem's persistency precisely because motorized mobility itself is left untouched.

The rapid return of heavy traffic in the Global North after the lifting of Covid-19 pandemic-related lockdowns also meant the return of traffic noise. The appreciation of the relative silence and heightened awareness of the sonic environment appeared to have no longstanding effects. Our analysis of three discourse coalitions around traffic noise in the Netherlands—together covering a time span of about a century—aims to contribute to understanding the persistency of the problem and emphasizes the ambivalence of the discourse coalitions examined: while attempting to solve noise problems they also tended to shift attention away from structural interventions in traffic flows. We should qualify our findings by flagging that the Rotterdam example shows that acceptance of existing sound levels in one place does not principally preclude interventions in traffic flows in another. By and large, however, the three discourse coalitions have not yet enacted highways to silence.

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