

Paperwork⁵

↳ THE COST OF SILENCE

CURATORIAL TEAM

17TH INTERNATIONAL ARCHITECTURE EXHIBITION
LA BIENNALE DI VENEZIA
PAVILION OF TURKEY

Architecture¹² as² Measure⁷
Ölçü⁴ Olarak⁶ Mimarlık⁸

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Tablo 4. Maden işletmelerindeki bazı ekipmanların gürültü düzeyleri

İş çeşidi	Ses basıncı (dBA)	İş çeşidi	Ses basıncı (dBA)
Lokomotifler	85 – 95	Açık kömür ocağı yıkama tesisi	114 – 125
Uzunyukarlarda üretim	87 – 95	Kırma tesisi	104 – 118
İhraç kuyusu	90 – 98	Banlı konveyör	100 – 102
Kompresörler	90 – 100	Paletli dozer	114 – 125
Jeneratör istasyonları	94 – 95	Lastik tekerlekli yükleyici	110 – 125
Ayırma elekleri	95 – 100	Eğim yukarı kamyon nakliyatı	116 – 125
Kör kuyular, cevher iletim noktaları	96 – 98	Ekskavatör - kepçe	116 – 125
Zincirli konveyörler	97 – 100	Yeraltı kömür ocağı	
Dizel motorlu YTB araçları	97 – 102	Tamburlu kesici-yükleyici	83 – 93
Kıvrık hırac kafes ve skipleri	98 – 100	Elektrikli lokomotif	85 – 95
Başanlı hava ile galeri hazırlığı	105 – 112	Zincirli konveyör	97 – 100
Emici tipte ana radyal vantilatör	100 – 120	Yükle-taşı-boşalt aracı	95 – 100
Açık andezit ocağı		Sürekli kazı makinesi	97 – 103
Bog banlı konveyör	103,1 – 108,4	Damperli/dampersiz kamyonlar	95 – 100
Taşyan banlı konveyör	114 – 117,4	Vantilatör	90 – 100
Kırıcı	123,7 – 124,1	Prömatik aletler	114 – 120
Delici, 10 m	73 – 77	Uzunyukar kazısı	96 – 101
Ekskavatör	65,3 – 88,1	Yeraltı kömür ocağı	
Buldozer, 10 m	80 – 91	Zincirli konveyör	74 – 96
Bog – delta kamyon hareketi (5 m)	84,7 – 93,7	Tüm makineler ve işçiler	77 – 97
Kompresör, 2 m	100 – 110	Hidrolik pompa istasyonu	87
TTK Amasra Müessesesi		Tumba girişi	104
Yeraltı	72,3 – 104,2	Banlı konveyör yamı	89
Yerüstü	86,1 – 102,1	Trolley	105
Lavlar	88,9 – 95,4	Hava kompresör istasyonu	97
Armutçuk Müessesesi		Vantilatör yamı	115
Yeraltı	74,2 – 106,5	Kırma taş tesisleri	
Yerüstü	83,2 – 103,3	1. İşletme Konkasör	98,4
Lavlar	87,9 – 102,2	Büro ve sosyal tesisler	76,0
Kozlu Müessesesi		Yatakhane	60,4
Yeraltı	69,3 – 104,3	2. İşletme Konkasör	97,6
Yerüstü	84,2 – 104,2	Büro ve sosyal tesisler	73,5
Karadon Müessesesi		Yatakhane	57,7
Yeraltı	74,3 – 103,9	Kanyon (110 HP)	82 – 87
Yerüstü	87,5 – 104,5	Kanyon (170 HP)	85 – 88
Catlağzı Lavvan	71,3 – 97,8	Kanyon (220 HP)	86 – 89
Maden Makineleri Atölyesi	70,4 – 117,3	Kanyon (230 HP)	85 – 89
		Kanyon (240 HP)	89 – 95
		Kanyon (270 HP)	93 – 97

Bülent Erdem et. al., “Maden işyerlerinde gürültü kirliliği,” [Noise pollution in mining workplaces] ISEM2016, 3rd International Symposium on Environment and Morality. (Alanya, 2016), 863.

In 1829 Johann Wolfgang von Goethe wrote that “architecture is ‘petrified’ music.”¹ This quote is now often seen as proposing an overly poetic and generous equivalence between architecture and music’s shared logics of composition and effect. Yet, Goethe’s words might still be useful to think about architecture and music’s baser affinity: architecture makes noise. Or rather, while buildings themselves are rarely “heard” beyond the creak of wood framing and the dull hum of mechanical conditioning, the production of architecture, from the construction site all the way back to sites of material extraction, is an exceptionally noisy affair.

This rarely-considered sonic attribute of architecture’s production is made explicit in this document, where the sound levels of mechanical equipment from different Turkish mining companies—drills,¹ trucks,² and compressors³—are quantified in decibels, spatializing sound as a function of energy. Here, sound might be seen as a measure for the economic expediency of the Turkish and

1 Goethe also adds that both architecture and music cultivate the same “tone of mind.” Johann Wolfgang von Goethe, *Conversations of Goethe with Eckermann and Soret*, trans. J. Oxenford, (London: Smith, Elder, & Co., 1850), 146.

international construction industry: the noisier the site of extraction, the more rapidly Turkey's mineral resources are being extracted for use nationally or abroad. This positive correlation between noise and economic vigor implies its own inversion. What is the cost of silence at a site of extraction, bearing in mind less CO2 production, fewer toxic pollutants, and less pressure on vulnerable human and more-than-human populations?

If we were to decide a genre for this document-as-score, it could be said that this list comprises a piece of site-specific *musique concrète*.² A discordant and cacophonous flow of bodies, materials, and machines at the site of extraction, before the materials are “frozen” by their temporary instantiation into a fixed building. Like any piece of music, however, architecture's “symphonic” clamor at the site of extraction must at some point come to an end.³ Whether this silence will occur because mineral resources at the site are exhausted, or because other economic and political actions bring extraction to a halt, remains to be seen.

2 *Musique concrète* is an experimental music movement that originated in the 1920s and 1930s in France and Germany which takes found sounds of environmental noise and collages them into pieces of music that reject traditional rules of harmony and rhythm.

3 All pieces of music eventually must end, even those which stretch to absurd extents, such as John Cage's composition *As Slow as Possible* which takes 639 years to perform.