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Researching Musicscapes in Urban Tourism: Case of the Town of Krk

Diana Grguric⁺ (Croatia)

Abstract

The paper examines the acoustic quality of the seaside promenade of the Town of Krk during the tourist season. Its musicscape is analyzed in the light of the sound (sonic) pollution, which is the consequence of developing and using music in the tourism offering. The collected data of objective and subjective measurements of acoustic quality, namely sound pressure measurements and a local community survey, are processed. The theoretical part of the paper deals with soundscape and musicscape concepts. The results of the research point to the diminished resolution of the soundscape during the tourist season, due to inadequate music management. The paper contributes to raising awareness of the issue of noise resulting from the use of music in tourism and seeks to highlight the need for developing audio management - a sound and music management model based on the principles of acoustic ecology and the collaboration of all stakeholders in a destination.

Keywords: *Soundscape, Noise, Musicscape, Town of Krk, Tourism, Local Community*

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Introduction

Research in this paper starts from the assumption that music can be an important tourism product of entertainment; concurrently it is an expression of the culture of a space and an experience of the moment (Long, Lashua and Spracklen, 2014). Whether performed live or recorded, music in tourism is a desirable, commercial and mass-scale form of a tourism offering of substantial economic potential. Opposite to these advantages are the negative effects of music, foremost among which is noise, the unwanted outcome of the use of music which threatens the soundscape and adversely impacts local communities exposed daily to a musicscape. This paper explores the acoustic quality of the open urban space of the Town of Krk. Situated on Croatia's largest island, the Town of Krk is a well-known tourist destination whose residents have been complaining to town authorities for the past three years concerning noise caused by tourism-related music activities. The aim of the paper is to gain insight into the acoustic quality of urban spaces during the tourist season, open up new prospects for music research from the perspective of acoustic ecology, and underline the need for sound and music management in the framework of sustainable development.¹ This paper consists of a theoretical part and an empirical part. The theoretical part views music through the concepts of soundscape and musicscape (Schafer, 1994; Oakes, 2000; Wrightson, 2000). The challenges posed by these concepts lie in understanding music and sound in active relationships with the listener and space. The empirical part focuses on the collection and analysis of data obtained from objective and subjective measurements of acoustic quality. Data were collected in the field over a period of 52 days, during which time the sound pressure levels of sources of music were monitored. An e-survey was carried out among residents concerning their perception of acoustic quality, and face-to-face interviews were conducted with workers in hospitality and tourism responsible for managing music in tourism purposes.

Theoretical Background

Music plays a large role in the development of urban tourist destinations. Music represents a "tourism culture" and its resulting tourism logic, discourse and practice (Gotham, 2007). It encourages entertainment, and creates and diffuses perceptions of a destination, making travel easier for tourists and facilitating familiarization with a destination (Long, 2014). Being an integral part of the urban tourism offering, music is frequently present in public urban spaces. As the bulk of tourism traffic takes place in these spaces, they help to ensure the tourism development of towns and cities as desirable and unique destinations. Here, "public space" is defined within the concept of space as a stage of interaction, socialization and representation of a society as well as of a culture, while a destination is seen as a "place" which means an instantaneous configuration of positions and implies an indication of stability (Lefebvre 1991; Ce Certau 1984).

Strategies for tourism development in urban destinations take into consideration residents' attitudes and perceptions. On the one hand, tourism, as a branch of business, generates profits and brings prosperity to local communities but, on the other hand, tourism development affects the quality of life in a city and its

environment (Bestard, Nadal, 2007; Liu, Seldom and Var, 1987; Perdue, Long and Allen, 1990). Residents tend to draw conclusions about tourism by weighing relative gains and losses. Hence, their attitudes and perceptions are exceptionally important in promoting and developing sustainable destination-management models (Andriotis and Vaughan, 2003). Regarding music management, the need has emerged for a new model due to the intensifying problem of noise, which is increasing proportionally with the growing offering of both live music and recorded music (Sari et al, 2014). Together with crowding, drug dealing, and the degradation of the cultural and biological ecology of a space, noise is one of the foremost negative effects of music tourism (Connell and Gibson, 2003; Pavlukovic, Armenski and Alcántara-Pilar, 2019). In accordance with the postulation on the uniqueness and dependence of nature and society, the soundscape concept underscores the issue of sound pollution and noise as the outcome of technological progress that has greatly contributed to reducing the resolution of the soundscape and affecting the (in)sensitivity of people to the acoustics of a place (Truax, 1984; Wrightson, 2000). This holistic concept, put forward by Raymond Murray Schafer, implies the total sound of a space, as the product of an active relationship set up between the listener, the physical space and sound (Schafer, 1994).² The acoustic quality of a soundscape is commonly evaluated according to noise. The effects of noise are the result of the masking of reflected and direct sounds of human activity such as talking, movement, etc., causing the acoustic horizon to reduce and substituting information with anti-information: noise (Wrightson, 2000:11). To raise public awareness of the harmful effects of noise on the acoustic environment, Schafer coined two concepts to evaluate soundscapes. These are “hi-fi” (high fidelity) and “lo-fi” (low fidelity). “Lo-fi” refers to soundscapes in which noise prevails over the signal, making communication impossible.

In “hi-fi” situations that have very high sound resolution, the soundscape does not have to be a quiet one but rather one in which unwanted sounds do not mask or pollute wanted sounds (Schafer, 1994). Accordingly, noise does not necessarily mean loudness, as the experience of noise depends on multiple parameters including preferences, expectations, and the psycho-physical condition of listeners as well as on many other elements that determine the listeners’ subjective and objective conditions. For the purpose of this paper, however, noise can be defined as any unwanted “loud sound” and “in general usage today, it often refers to particularly loud sounds” that exceed the permissible limits in decibels. (Schaefer, 1994:182). Pursuant to the soundscape concept, music performed in open, urban public spaces directly impacts people’s perception of the environment and establishes a new conceptual character of space – the musicscape. A musicscape is a type of organized soundscape in terms of aesthetical and social aspects defined by music (Sakakeeny 2015:115-120). A musicscape refers to the music that can be perceived in a specific place and at a specific time by a person (Lelieveldt and Boele, 2018). It is a kind of “acoustic sanctuary” or an area whose physical characteristics allow it to retain its own acoustic character against intruding forces (Truax, 2001:97). In this respect, a musicscape is a type of built space of a recreated relationship between space, the listener and sound. The features of a musicscape’s layout and functionality derive from the use of space and the way in which its service character is shaped (Bitner, 1992). The design is based on the principle

of aligning musical variables such as melody, rhythm, harmony, etc., with the expected cognitive, emotional and psychological behavior of people in a given space (Oakes, 2000). A musicscape design model for tourism purposes is based on the idea of aligning music with the creation of a positive mood in people that fosters pleasure, fun and socialization (Ballantyne, Ballantyne, Packer, 2014). To create such a mood, musicscapes built in tourism are often subjected to loud levels of sound pressure and as such they disrupt the acoustic quality of a destination and contribute to sound pollution. Hence, audio management in tourism needs to be promoted on the principles of acoustic ecology, which refers to the valorization of sound and music aimed at reinforcing positive elements and eliminating negative ones (Stipanovic, Grguric and Jurina, 2018).

It is the strategic planning of music and sound, the objective, tasks and activities of which are planned in stages. Once a business policy has been devised, and positions in marketing and development, determined, design solutions are created to eliminate, maintain, reinforce or add wanted sounds and music content. The results of feedback and control to ensure the quality of the audio offering and ascertain the desired selection of sounds and music content are based on the measurement of sound pressure levels and the assessment of desirable and unwanted elements of the soundscape. The organizing function is based on the integration and collaboration of all stakeholders in a horizontal organizational structure grounded on creativity techniques and knowledge generation. Audio management relies on the soundscape concept and the sound evaluation model that includes subjective as well as objective parameters (Brown, 2007). This evaluation model is as inclusive towards objective noise as it is exclusive towards subjective silence. Namely, based on comparative evaluation, objectively qualified noise can be subjectively positive if it represents an aesthetical value of music and/or intentional action, as can objective silence be considered subjectively negative if the sound content is unwanted. In interpreting the comparative soundscape evaluation model, Brown (2007) refers to the psychological concept of the interrelation of person, place and activity (Herranz-Pascual, Aspuru and Garsía, 2010).

Problem Definition and Research Method

One of Croatia's leading towns in tourism, the Town of Krk is situated on the southwestern coast of Krk Island, between two coves in Krk Bay. The internal layout of the town is underpinned by the town gate and fortifications. The town's landmarks include historical buildings such as the old Town Hall on the town square, the Frankopan castle on Kamplin Square, and the tower on the Seaside Promenade. The Seaside Promenade, popularly called the Riva (waterfront), is a place of physical contact between the town and the sea – a pleasant promenade and a harbour for boats and small vessels. During the tourist season, from June to the end of September, the Seaside Promenade becomes the main town area for tourist activities, mostly musical events. As a result, music modifies the promenade's conceptual character by suspending the perception of non-music sources from its soundscape – such as the sound of marine engines and ships' whistles, human communication, road traffic, the peeling of church bells, the sounds of the sea and the cries of seagulls – in favour of the perception of organized sound – live and recorded music.

The musicscape of the Seaside Promenade is diverse, in terms of content. Recorded music can be heard from the terraces of the seven hospitality and restaurant establishments located on the waterfront. Live music performances, co-organized by the Tourist Board and the Town of Krk, are held on a stage assembled in the central part of the Seaside Promenade. While live music performances are held periodically, recorded music is played daily.

Music management on Krk Island during the tourist season, a time when music has a key role in the offering, points to the lack of a plan for developing music programmes, and to stakeholders taking impromptu action and making personalized choices and decisions (Stipanovic et al, 2018). The appropriate evaluation models and monitoring processes are missing in the way the non-systematic development of individual entrepreneurial initiatives is managed. On the other hand, as a result of non-compliance with the sound pressure levels prescribed by environmental law, music in Croatian tourism has for many years been generating irreconcilable public debate between those in favour of the non-limited use of music in tourism and those who see that as misuse.³ In consideration of these facts and given the little research into the use of music in tourism from the perspective of acoustic ecology, it was deemed necessary to establish the effects of music by analyzing the situation in practise to gain clearer insight into this issue.

Research methodology involved both the quantitative and the qualitative method. Sound pressure levels were measured in three locations along the Seaside Promenade between July 24th 2018 and September 15th 2018. A professional company set up and calibrated the sound pressure meters. Measurements were taken of equivalent sound levels, the averaged value of sound pressure in 60s (LEQ) dBA. A questionnaire was used to determine residents' perceptions. A survey invitation was published on the website of the Tourist Board of the Town of Krk and the questionnaire was available both online and in paper form from September 3-15, 2018.⁴ Survey results were processed using descriptive statistics, including arithmetic evaluation. Spatial sound image observations were conducted several times, during the day and night. Interviews were also held with hospitality workers concerning music management and their musicscape experiences.

Objective Measurements

Sound pressure levels were measured at three locations along the Seaside Promenade. The most active music sources, according to the opinion of Town of Krk authorities based on complaints received from residents concerning unacceptably high volumes of music, were selected as measuring sites. Measuring station M1 monitored the sound activities of public music performances on an assembled stage, and measuring stations M2 and M3 tracked the sound pressure levels of the musicscape of two catering establishments.

The results of monitoring are brought together in two diagrams showing the 24-hour values of sound pressure levels recorded at all three measuring stations. Figure 1 illustrates the daily situation (July 10th) and Figure 2, the periodic situation marked by a public live-music performance on the assembled stage (August 8th).

The horizontal lines in Figure 1 indicate the highest threshold values of permissible sound pressure rating levels according to the Ordinance on the maximum permitted noise levels. From bottom to top, the first horizontal line marks the highest nighttime value at 45 dB(A) and the second line, the highest daytime value at 65 dB(A). The third line is the daytime threshold value of permissible noise rating level of 80 dB(A). The values used here are the ones prescribed for the type of space with a mixed, predominantly commercial use and residential use.⁵ (see Figure 1).

Measuring sites were selected in locations with no road traffic and very little marine traffic. Accordingly, the effect of residual noise from traffic on measurement results can be considered negligible. On the other hand, the increased number of people on the Seaside Promenade clearly causes residual noise. A comparison of measurement results presented in Figures 1 and 2 for measuring station M1, with and without music activities on the assembled stage, reveals a discrepancy larger than 30 dB. Hence, the residual noise from people at measuring station M1, relative to the noise from music activities – the musicscape, is negligible. At measuring stations M2 and M3, results obtained from measurements at hospitality facilities always included music activities – the musicscape, and the residual noise from people at those facilities. To measure the actual noise at the measuring stations, control measurements were also taken in specific time intervals when there were no music activities – musicscape. The results thus obtained show that the residual noise from people is lower by 10 dB than the total level measured that included music activities – musicscape. Based on this, it can be concluded, with a high degree of certainty, that the noise of the musicscape – that is, the music activities of reproduced music – has a primary effect on the measurements that are the subject of this paper.

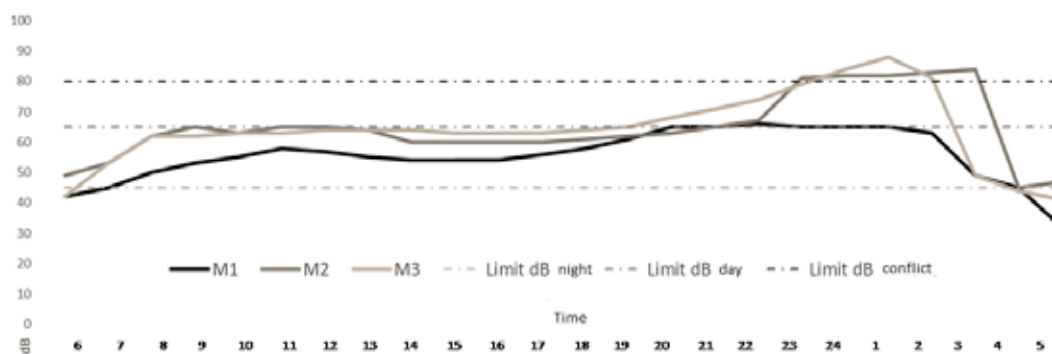


Figure 1. Sound measurements in db from 3 measurement stations (M1-3) – Y axis overlaid with night and day limits. Hour of day in 24hr scale along the X axis.

When there are no music activities on the assembled stage, the prescribed values of daytime levels are not exceeded at measuring station M1. Measuring stations M2 and M3 show sound levels within the prescribed daytime values but indicate a significant shift after 8 p.m. when values begin to gradually rise. A level of 80 dB is reached between 10 p.m. and 11 p.m., lasting up to 3 a.m. with minor deviations and then dropping sharply to below 45 dB at 4 a.m. (see Figure 1).

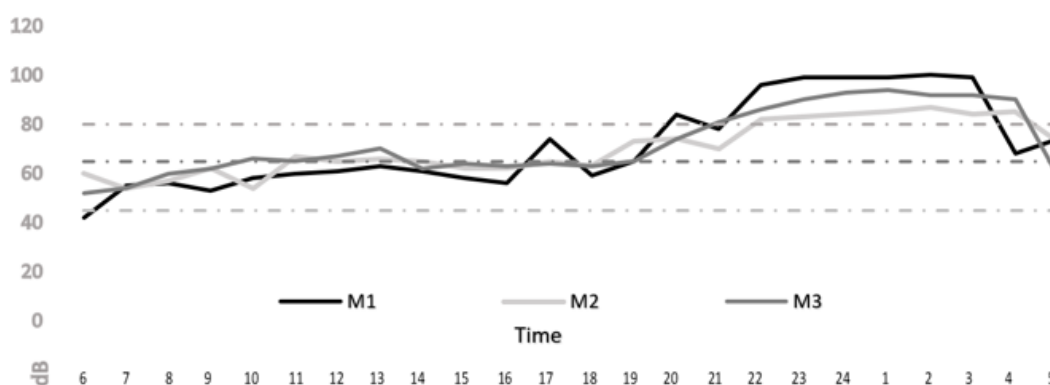


Figure 2. Sound measurements readings from 3 stations (M1-3) during a public concert over time.

Figure 2 illustrates the values measured on the day a public concert was held on the assembled stage.⁶ The changes in values of sound pressure levels registered at all three measuring stations coincide with the music activities that were planned for that day, beginning with a sound check from 4:20 p.m. to 8 p.m. and continuing with a concert that lasted from 9 p.m. to 3:15 a.m. Recorded music was played on the stage's sound system from 8 p.m. to 9 p.m. In the diagram, a considerable increase in sound pressure levels can be detected at all measuring stations in the period from 4 p.m. up until 9 p.m. Measuring station M1 registered a sound pressure level of 80 dB lasting continuously for half an hour, from 8 p.m. to 8:30 p.m. During the duration of the concert, from 9 p.m. to 3:15 a.m., sound pressure levels ranged from 90 dB to 100 dB (see Figure 2). In that same period of time, measuring stations M2 and M3 registered high sound pressure levels relative to the same time period in Figure 1.

Subjective Measurements

A total of 107 respondents filled out a questionnaire containing 13 questions of various types such as dichotomous, rating scale and open-ended questions. Of the respondents, 55.14% were female and 44.86%, male. With regard to age, the respondents ranged from 22 to 71 years old. The first five survey questions referred to music performances organized by the Tourist Board and the Town of Krk. The sixth and seventh question focused on the music played at catering establishments and the eighth and ninth, on pleasant and unpleasant sounds in the soundscape. Questions 10 and 11 asked respondents to rate the quality of the soundscape, and questions 12 and 13 asked respondents to suggest improvements to the quality of the Seaside Promenade's soundscape. The below results have been singled out from the survey analysis.

During the public performances of live music, organized by the Tourist Board and the Town of Krk and held on the assembled stage on the Seaside Promenade, 92% of respondents stated that they could hear the sound of the music in their homes; 6%, that they could not hear it; and 2% did not know. The respondents who gave a positive reply were then asked to state how they experienced the music they could hear: 30% of respondents experienced the music as being pleasant and 31%, as being annoying, while 39% of respondents were impartial (see Figure 3).

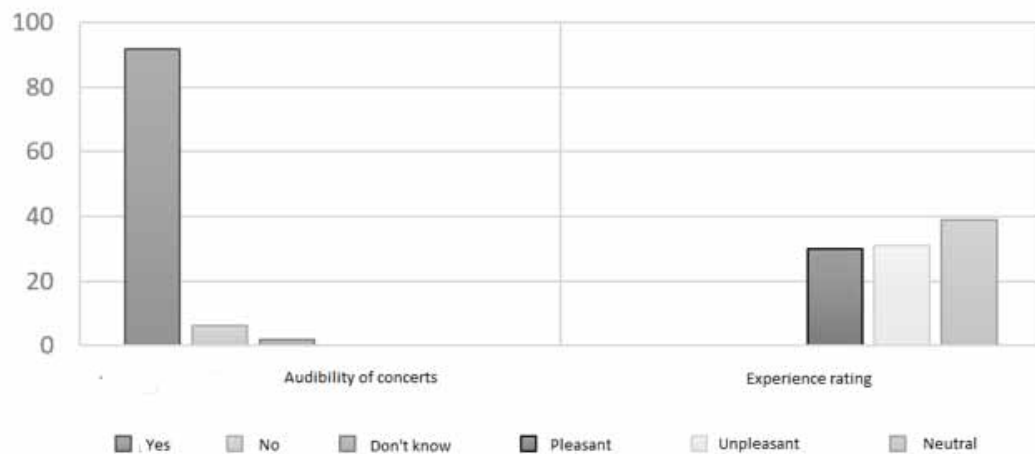


Figure 3. Chart of the audibility of concerts and receiver's reported experience.

Only 33 respondents (30.8%) replied to the question referring to town events that are unpleasant in terms of sound. Generally, at issue are events that are too loud, and a considerable share of the total number of examples given refers to events during which music performances are held on the assembled stage. The question asking about music events that are pleasant in terms of sound was answered by 35.5% of respondents. Most respondents believe that pleasant events have a “chamber-like sound”. Such events include the playing of a guitar on a beach, performances by school choirs, klape or harmony-signing groups and classical music ensembles, and acoustic performances.

Using a rating scale ranging from 1 to 5, respondents were asked to rate the importance of music events in the town's tourism offering. Fully 63.5% of respondents gave the highest rating of 5 to the importance of music events; 24.2%, a rating of 4; 8%, a rating of 3; and the remaining 4.3% of respondents, a rating of 2. Not one respondent gave the lowest rating of 1 to the importance of music events.

Most respondents (62%) gave a positive reply to the question pertaining to the audibility of music in catering establishments. Thirty-one percent of respondents did not hear the music; 4% responded “Don't know” and 3% did not answer the question. Of the respondents who gave an affirmative reply, 15% experienced the music as being pleasant; 55%, as being unpleasant and 30%, as neutral (see Figure 4).

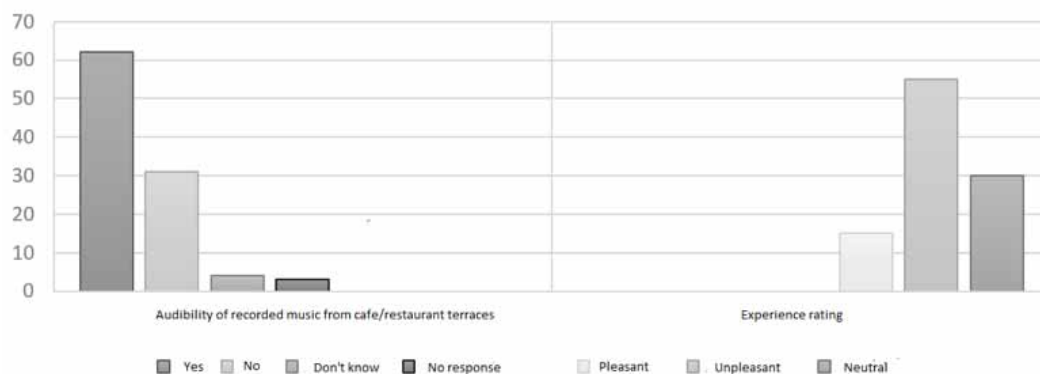


Figure 4. Chart of cafe/restaurant music and receiver's reported experience.

The table in Figure 5 presents the respondents’ answers to the open-ended questions regarding pleasant and unpleasant sounds in the soundscape of the seaside promenade. The below examples were selected by their frequency.

Unpleasant Sounds	Pleasant Sounds
Sound of church bells in the morning Sound made by municipal service providers	Sound of sea waves, Seagulls
Motorcycles driving through the old town centre	Crickets, frogs
Yachts in the harbour (The Adrenaline Ride)	Soft music
Noise made by people	Bird songs (not seagulls)
Screeching of seagulls	Street musicians
The clamour of intoxicated guests wandering the streets in the early morning hours	The sea, boats, the sounds of nature
Traffic	The sound of the wind, and also the sound of a bell tower striking the hours
Music too loud in cafes, making it impossible to talk without yelling	Moderately loud music in catering establishments that does not play long into the night
Fireworks! Too often! Very unfair to animals and to the people who love them.	The call of a scops owl, which unfortunately can rarely be heard anymore today

Figure 5. Table delineates respondent's categorization of pleasant and unpleasant sounds.

Respondents used a rating scale, ranging from 1 to 5, to rate overall sound quality during the tourist season. Only 8.4% of respondents gave overall sound quality a score of 5; 18.6%, a score of 4; 28.9%, a score of 3; 14.9%, a score of 2; and 20.5%, a score of 1 (see Figure 6).

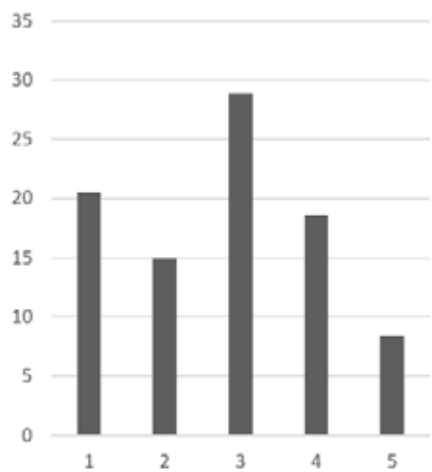


Figure 6. A chart rating the overall sound quality during the tourist season (1 is low, 5 high).

When asked to evaluate the importance of improving the quality of the musicscape to foster the prosperity of the town’s tourism, 78.5% respondents reported that it is important; 7.4%, that it is not important; 11.2%, that they do not know; and 2.8% gave no response (see Figure 7).

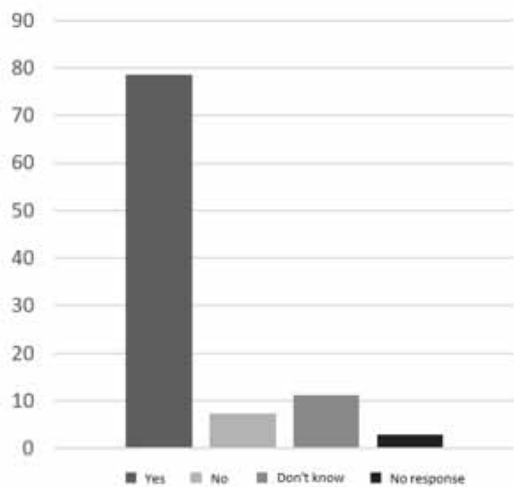


Figure 7. The percentage of respondents expressing a desire to improve the musicscape to support the prosperity of the town's tourism.

In response to the question whether the Town of Krk is affected by sound pollution during the tourist season, 44.8% of respondents gave an affirmative reply, 42.9% believe it is not, 5.6% stated they did not know, and 3.7% gave no response (see Figure 8).

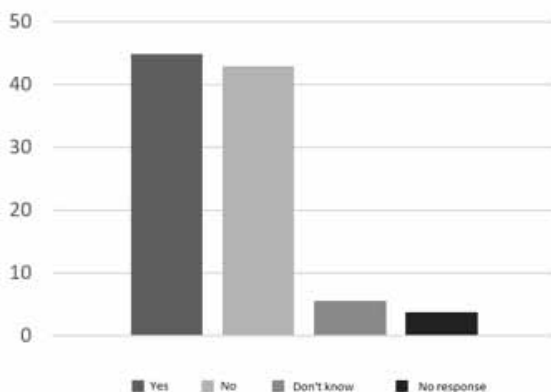


Figure 8. The percentage of respondents affirming there is an impact of sound pollution during the tourist season.

The last, open-ended question asked respondents to put forward proposals and suggestions for improving the soundscape. Their responses suggest the following guidelines: the relocation of sound events from the Seaside Promenade to other parts of the town, the regularization of loudness of music in catering facilities, the creation of new events that have smaller sonic dimensions such as chamber music concerts or events without sound systems, and putting a time limit of up to 1 a.m. on concert events held on the Seaside Promenade.

Conclusion

Kendall Wrightson (2000) notes that the resolution of a city soundscape is inherently low because it is full of sounds that mask each other, thus becoming indistinctive and homogenous. The reason behind this is the destruction and degrada-

tion of the natural environment in urban spaces. The musical re-creation of public urban spaces, where most of a city's tourism activities take place, is also driving the deterioration of city soundscapes. Schafer's (1994) soundscape concept involving a spatial approach to sound and Brown's (2007) comparative method of sound evaluation provide optimal frameworks for studying the acoustic quality of open urban spaces. This model allows for the participation of residents in assessing acoustic quality. Residents' attitudes and perceptions are important not only in evaluating the impact of noise, which is becoming a growing issue in tourist destinations, but also in devising plans to improve music management in tourism (Ap, 1992).

From the results of measurements of the daily situation (Figure 1) it is evident that music played in catering establishments dominates the soundscape of the Seaside Promenade. Sound pressure level measurements indicate a deviation from prescribed values in the time from 10 p.m. to 3 a.m. and 4 a.m., when values exceed 80 dB and are comparable to the values allowed in night clubs. The results of measuring periodic situations (Figure 2) show that the soundscape of the Seaside Promenade is occupied by concert activities even during daytime hours. A notable increase in levels is registered from 4:20 p.m. to 8 p.m. as a result of concert sound checks. These values exceed the daytime limits, and the acoustic situation is severely compromised by unpleasant but short sonic events – impulse noise – caused by the tuning of musical instruments and acoustical tuning. When recorded music is played on the stage from 8 p.m. to 9 p.m., sound pressure levels are higher than 80 dB, again notably exceeding permissible limits. During the duration of a concert, sound pressure levels range from 80 dB to 100 dB. At the same time, catering establishments increase the loudness of music contents on their terraces in order to protect the acoustic character of their service premises against intruding forces. Thus, the desire to overcome the acoustic dominance of the assembled stage generates competitiveness that leads to low fidelity, that is, a lessened sense of distinguishing between sounds, including the sounds of bodies – one's own voice.⁷

Even though music performances on the assembled stage account for the highest sound pressure levels, it seems they are not the main issue from the residents' perspective. Instead, the main problem is the musicscape generated daily by the catering establishments.⁸ Because people interact with music, continuous exposure can lead to a feeling of excessiveness and saturation that can in turn cause discomfort. This is made worse by the fact that the music residents are exposed to serves private interests and, seen as a mundane means of attracting guests, music is misused to call attention to the services of a catering facility for the purpose of making money.⁹

Some of the responses point to the possible consequences of the disruption of sonic relationships in the environment.¹⁰ The experience of sound diminishes and, in terms of lexicography, is reduced to loud and quiet, noticed and unnoticed, good (I like it) and bad (I don't like it) (Wrightson, 2000:12). Within the context of modern society and exposure to pervasive music and noise lies the key to under-

standing a (small) percentage of responses of survey participants who gave concrete examples of pleasant and unpleasant music events; it should be noted that the question did not limit the selection of criteria. In two separate questions, only 30.8% and 35.5% of respondents put forward examples of unpleasant and pleasant music events respectively. Typically, “very loud” music events and performances were reported as being unpleasant and “less loud” ones, as being pleasant.

The acoustics quality of the Seaside Promenade was rated with an average score of 2.9 (Graph 3) while opinions regarding the town’s noise pollution were almost evenly divided (Graph 5). With regard to those opinions, it would be interesting to ask to which extent is music linked in people’s minds with noise pollution, given the fact that acoustic ecology and music contamination in public spaces are issues that have been inadequately addressed as a result of a fossilized understanding of music as merely optional entertainment or a medium to (re)shape (one’s own) reality. The justification of this question, which certainly deserves to be included in future research, lies in the inconsistency between the relatively satisfactory mid-range rating of the acoustic quality of the Seaside Promenade and the high percentage of respondents who want improvements to be made in music management (Graph 4). Namely, the high percentage of people wanting improvements is substantiated by the inversely proportional degree of impaired acoustic quality caused by noise in the musicscape of the Seaside Promenade, and it also points to the residents’ high level of environmental awareness. In that context, the respondents’ answers confirm the hypothesis of the desirability of natural sound and indirectly speak in favour of the current trends of acoustic designing of soundscapes, protecting resolution and recreating acoustic features.¹¹ Indeed, recent research points to the importance of peaceful natural landscapes¹² and to the need of controlling noise in a destination’s acoustic environment in developing sustainable tourism (Liu et al, 2018).

Workers in catering establishments were also asked to comment on the musicscape of the Seaside Promenade in semi-structured interviews. They underlined the problem of too loud music that interferes with their job, making it difficult to communicate with guests and staff. Because of daily exposure to music they often have a feeling of saturation and the need for silence. Of the positive effects of music, they reported that music gives them incentive in their job and helps to create a friendly atmosphere in the catering establishment.

This paper confirms the existence of the problem of noise as the main consequence of music activities taking place during the tourist season. The obtained results point to the diminished resolution of the Seaside Promenade’s soundscape, in particular at night, and to the excessive exposure of residents to music content that surpasses the prescribed sound pressure levels. The local community is supportive of music activities in tourism and indicates the need for improvements to the musicscape. This involves designing a model for systematic management based on the principles of acoustic ecology and on stakeholder collaboration. Further research into this issue should apply more complex methods and should involve tourists in order to obtain deeper insights into the subject of research.

Endnotes

- 1 This study was financially supported by the University of Rijeka, project uniri-drustv-18-39.
- 2 Soundscape also refers to abstract constructions such as musical compositions and sound recordings if designed to create environments. (Schafer, 1994)
- 3 See the article by Biljana Savic and Ivor Balena: Što Zapravo želimo: Hrvatska u Stalnom Sukobu Između želje Za Zaradom od Turizma i Mirnim životom. Novi List, August 3, 2017. www.novolist.hr:8090/Vijesti/Hrvatska/STO-ZAPRAVO-ZELIMO-Hrvatska-u-stalnom-sukobu-izmedu-zelje-za-zaradom-od-turizma-i-mirnim-zivotom
- 4 It was possible for people to fill out the questionnaire in paper form in the offices of the Tourist Information Centre of the Tourist Board of the Town of Krk.
- 5 The Ordinance on the maximum permitted noise levels in environments where people work and live under the Noise Protection Act (Official Gazette 55/13, 153/13, 41/16), effective as of May 10, 2016, prescribe the maximum permissible daytime and nighttime noise levels according to the use of space that can be compared with land usage established by urban planning. Public urban spaces such as parks are not covered by the Ordinance although specific mention of them is made in the Noise Protection Act. Memorial spaces such as memorial parks and cemeteries are not covered also. The Act does not refer to sound generated by the sounding of bells or electro-acoustic devices from religious facilities or to sounds made by the use of artefacts representing cultural goods in accordance with regulations on the protection and conservation of cultural goods. In terms of the Act, a day lasts 12 hours, from 7 a.m. to 7 p.m., evening lasts four hours from 7 p.m. to 11 p.m., and night lasts eight hours from 11 p.m. to 7 a.m.
- 6 The figure illustrates the sound pressure levels measured on August 8, 2018, the first day of celebrations organized by the Tourist Board and the Town of Krk in honour of St. Lawrence, the town's patron saint. The events included public music concerts by Croatian singers and groups, held from 9 p.m. to 3 a.m. each day from August 8-10 on the assembled stage on the Seaside Promenade.
- 7 "Less decibels on the Riva during concerts! People need to and should be able to talk to each other and be heard. You can't hear yourself think from the loud music and your vocal cords begin to hurt from trying to talk to someone!"
- 8 "Limit the noise – that is, music – coming from catering establishments to normal levels. It's not okay that there should be quasi-discotheques in the open air of the town center." "Maybe we could entertain the idea that the same type of music is played along the entire Riva (at least in the part where cafes and restaurants are located). Because when each café/restaurant has its own music, it's sometimes hard for guests to enjoy themselves."
- 9 "Lower the volume of music in catering establishment so that only guests can hear it. Otherwise, it's like this: three cafes, side by side, each competing to see whose music will be the loudest! Horrible! A nightmare! Please come and see for yourselves. Thank you. Do something about it, once and for all."
- 10 "Pleasant' is difficult to define. Anything other than very loud music coming from the catering establishments would be alright."

- 11 Zadar is an example of a destination known for the sounds of the sea produced by an acoustic installation, the Sea Organ. This installation demonstrates the implementation of the soundscape theory and scientific research in the methodology of improving urban spaces to promote destinations (Oberman, Bojanic Obad Šcitaroci, Jambrošić, 2015).
- 12 Natural tranquil areas are defined as “where the sounds of nature are predominant while anthropogenic sounds are rare and indistinct; and the mean sound level is below 30-35 dB” (Bernat, 2014:113).

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