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Feasibility Study of Creating Audio Tourism with Emphasis on Urban Sounds Case study in three cities: Tehran, Mashhad and Isfahan

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Abstract

Historical, cultural and environmental attractions absorb investments in tourism industry in certain regions.

The tourism industry has always been based on visual attractions. This article, however, tries to study the feasibility of audio attractions in absorption of investment in tourism industry. The question is whether sounds can attract tourists to a particular region? Music and different musical instruments in various regions may well have this potential. Besides, would it be possible to attract tourists to a region through environmental and peripheral sound effects? Is it possible to relate a specific sound to a definite region to be known as its attribute? Creating audio tourism can only be done through the historical, social and cultural backgrounds of a city. The case study on three cities of Tehran, Mashhad and Isfahan demonstrates that audio tourism can not only help tourism industry grow but is also rich enough to be considered as a separate subject matter. Audio parameters can be used in tourism industry for advertising in different multimedia including in travel agencies and museums as well as in souvenir and gift shops. This article elaborates how these sounds can be applied to individual cities and in what ways audio tourism may develop.

Keywords: *Audio Tourism, Urban Sounds, City Personality, Historical Memory.*

JEL Classification: Z1

1. Introduction: Urban Sound Attractions

Tourism industry consists of different parts and sound plays an important role in it. Over the past decades, sound has come to have a particular role in diverse disciplines such as sociology, anthropology, cultural studies and visual studies. (Feld & Brenneis, 2004) Raymond Ledrut as a sociologist propounds the idea known as *city personality* and he mentions a form of historical continuity that can be mostly found in old cities. Personality of a city is in close relevance to the historical memory of the people of that city. As Fakouhi mentions, "The expression of citizens in their own city during their city life inevitably gives distinct *personality* or *personalities* to the city and this unconscious identification can be transferred from a specific group to all the citizens and even be determined by other people from other cities." (Fakouhi, 2003) This can be referred to as the expression of the citizens of a city from their urban sound perception. And it can also affect the tourist sound perception of that particular city. Fakouhi also says: "Accumulation of memory can be explained through a complex sensational collection such as pictures, sounds, scents, flavours and historical memory which can be shared among the members of a group." (Fakouhi, Urban Anthropology, 2003, p.259).

Tehran, Isfahan and Mashhad are three cities with great historical backgrounds in Iran. Therefore, each has a particular personality for itself. But collecting the historical memory of the citizens is not an easy task. For instance, metropolitans such as Tehran are crowded at the first glance. Urban sound in these cities are often considered intrusive, undesirable and are referred to as noise. (Jennings & Cain, 2013) Most citizens don't recall the former sounds of their city and they become more and more familiar with undesirable sounds.

It's difficult to consider a specific sound for metropolitans or big cities such as Tehran as their identical audio characteristic. The first sound that pops up in any mind would be traffic noise. But for touristic and historical cities such as Isfahan or religious and touristic cities such as Mashhad it is easier to find sound attractions.

Although it is a clear fact that not all the existing sounds in a city has a sonic attraction to the citizens and the tourists. It is also probable to find unique sounds in each individual city. The repetition of a sound such as abating noise made by public transport doesn't mean that this sound should remain with the sonic understanding of a city. Despite those sounds, other sounds can also be found. Therefore, we put emphasis on gathering various data from the interviewees about their perception about the sounds of Tehran, Isfahan and Mashhad. Both citizens and tourists were asked whether they can define that particular city with a specific sound (a sound which only belongs to that particular city). Thus this research tries to find out whether the tourists and citizens of each of the mentioned cities are able to define a specific sound for them or not?

Audio tourism is a new challenging topic which needs a great deal of study and research. It has always been with us, but its individual entity has been neglected because of taking it as a part of audio-visual tourism. This subject has the capacity of being studied by its own potentials. We believe that particular sounds can be found in a city and can become a source for stimulating memories of a place being heard from cards, toys, souvenirs, websites, weblogs, podcasts and other digital mediums.

2. Literature Review

Many research projects has been done on audio capacities and on tourism separately. But audio tourism is a new term to be studied on. To gather information for this research there were many useful information from other disciplines and areas. Jennings and Cain (2013) made a very interesting research on the probability of improving urban sounds. They believe that public sound can be perceived to be *positive*. Their

research proposes that the meaning of *positive* for a public space is quite different for three types of people, each with a different level of direct engagement with the soundscape: planners; serious listeners and users of the space. (Jennings & Cain, 2013). This research indicates that understanding urban sounds differs from one group of people to another. This was a useful finding that structured our next steps for this research.

In a similar context, Trevor Cox (2010) discusses about *positive soundscape*. He mentions that urban design is only really concerned with abating noise made by public transport or industry: the subtle and interesting sounds that can enhance cities are overlooked. (Cox, 2010)

Interestingly, Feld and Brenneis (2004) in doing anthropology in sound, discussed sound from an anthropological perspective. Their conversation explores general outlines in anthropology of sound and they discuss about sound as a new medium for ethnographic researches. (Feld & Brenneis 2004) Their discussions are helpful in doing an audio case study.

In another discipline, Chang, Jang and Chiu's (2012) study aims to understand users' intention to adopt podcasting in the context of e-tourism by using media selection theory and innovation diffusion theory. In their research they mention that "although traditional guidebooks contain valuable references for travellers, podcasting provides users an easier and more convenient and flexible way to acquire necessary information for their trips." (Chang, Jang & Chiu, 2012)

Yu and Kang (2010) in their case study discuss about factors influencing sound preferences in urban spaces. Their results show that with increasing age or education, people tend to prefer natural sounds and are more annoyed by mechanical sounds in general. It has also been found that gender, occupation and residence status generally would not influence the sound preference evaluation significantly. Their study also shows that in terms of physical factors, behavioural, and psychological factors, their influence on the sound preference evaluation is insignificant, except for limited case study sites and certain sound types. (Yu & Kang, 2010)

In further studies, Ismail (2013) investigated the soundscape preference of the sonic environment in Cairo. His results confirmed a direct relevance of the linguistic semantic auditory judgment. Cairenes were also found to express their sonic environment linguistically based on physical properties rather than semantic features and values.

3. Methodology

In collecting information to complete this research, both library research method and field research were used. Three cities with three different functions in Iran were chosen for the case study: Tehran as the capital city is a populated metropolitan. The second city was touristic and historical city of Isfahan. And the third city Mashhad, was chosen because of its religious function. All these three cities have touristic and historical attractions but their main roles define their functions in different levels.

To gather data on audio perception for each of the three cities, in-depth interviews were done in each of them during two different seasons. Two different seasons (winter and spring) were chosen to increase the possibility of sound data collection due to seasonal changes. The questions were asked from both of the citizens and tourists. Each of the interviews took place in a separate location, to eliminate the possible errors that might have been occurred by soundscape perception of that particular region. Also, it helped to observe if the answers may differ from the first collected data from one soundscape to another.

People: The interviewees were chosen by availability sample method. 16 individuals including tourists and citizens were interviewed in Tehran each time which means 32 individuals in total in Tehran were interviewed. In Isfahan 28 people were interviewed in total. 14 individuals for each session. And in Mashhad 30 people in total were interviewed. 15 people each time.

Analysis: For analysing the achieved data we used histogram and variable case data matrix to give a better understanding of the collected information and at the end, results were categorized separately for each city through their similarities and functions.

4. Audio Tourism: Tehran Case Study

“City personality doesn’t necessarily adapt to a city as a whole.” (Fakouhi, 2003) Tehran as a metropolitan is a host to various ethnicities. Its *historical memories* are in danger of vanishing among different ethnics and accents. On the other hand this ethnic variety is interestingly building up a new *memory* for itself. Anyhow, recording the *historical memories* before merging and vanishing is of paramount importance.

Location and People: Two different locations were chosen for the interviews. The first interview took place in *Tehran’s Old Bazaar*¹, and the second in *Tajrish Bazaar*². In Tehran Old Bazaar we interviewed 16 individuals in which 5 were tourist and 11 were Tehran citizens. In second interview in *Tajrish Bazaar* we also interviewed 16 individuals in which 6 were tourist and 10 were Tehran citizens.

Findings in Tehran: The interviewees mentioned various sounds in both interviews in Tehran. Many of the mentioned sounds can be heard in other cities as well and they do not have any distinguishable characteristic. Some of the mentioned sounds were natural sounds, thus, they cannot play a role concerning the research aims in collecting urban sounds. In general on the basis of all the gathered data, Tehran sounds could be categorized in two major groups:

- A-Urban obtrusive sounds
- B-Urban desirable sounds

Table 1. Tehran Sound Categories

<i>General Categories</i>	<i>Sub categories</i>	<i>Data</i>
<i>Obtrusive or intrusive sound</i>	Human	Hawkers, Buskers, Town cires: Namaki, Lahafdoози, Paddlers and Junk-buyers Commotion, uproar, crowd, bustle
	Industrial and mechanical	Car horn, car brake, traffic noises
<i>Desirable sound</i>	Historical	Zurkhaneh, Shahre-Farang
	Natural	Birds, Water raceways, Rain
	Human	Accent, Azan

A- Urban obtrusive sounds: Obtrusive sounds are undesirable sounds that every visitor or citizen hear every day. These sounds are normally industrial or mechanical sounds referred to as traffic transportation sounds. But beside the industrial and mechanical sounds in Tehran, some undesirable human sounds can also be heard. Some of these sounds might seem nostalgic to some inhabitants despite their annoyance and during time their functions have changed. These sounds convey different feelings from one person to another. As mentioned, Tehran urban obtrusive sounds can be divided to two major categories:

- 1- Human obtrusive sounds
- 2- Industrial and mechanical obtrusive sounds

1- Human obtrusive sounds. Tehran is a host to a huge number of immigrants who have settled in this city and are looking for new opportunities and jobs. Thus, some new jobs have emerged such as *hawkers* and *town criers*³. In Tehran there are some different sort of hawkers, some known as *Namaki*⁴ collect the used breads from homes, some shovel the roofs during winter, some other are peddlers with vehicles cry out in their loud speakers suggesting to buy second hand materials from homes. Among those jobs there are quilt- makers known as *Lahafdoози*. They have a warm old sound that cries out their job until a door gets

open in the street and people offer them to fix their cotton made coverlets. Quilt-makers used to have a very special instrument for their job. Furthermore to their own interesting sound, the instrument had also an interesting and weird sound. Buskers who sing in the streets are another sound that can be heard in Tehran. These sounds are all familiar for the citizens. *Namaki* and *Lahafdoози* (quilt-makers) are two vanishing jobs that can hardly be heard these days and they seem nostalgic to the older people. But those loud peddlers and junk- buyers with their loud speakers will remain intrusive although they are functional and some citizens may sell some useless things to them, still their sound remain obtrusive in people's mind. These jobs may be found in other cities but not to this huge extent and interestingly some tourists have also mentioned these sounds in their interviews.

Another human sound which was considered obtrusive was described in different words such as commotion, uproar, crowd, congestion, and bustle.

2- *Industrial and mechanical obtrusive sounds:* These sounds are the main cause of sound pollution. They are consisted of sounds such as car horn, car brake, anti- theft device alarm, harsh automobile sounds and such other sounds.

B- Urban Desirable Sounds: These are sounds which can have a kind of attraction and usually do not cause any confusion or exhaustion. Some of these sounds are not urban indicators and they can be categorized as natural sounds which normally exist in a city. These sounds in general can be categorized in three major groups.

1- *Historical sounds:* These sounds are originate from historical backgrounds of Tehran. Fortunately they still linger in social and historical memory of the city and its elder inhabitants. Some of these sounds belong to a place named *Zurkhaneh*⁵. *Zurkhaneh* is a place for Iranian traditional sports. Inside this place various attractive sounds such as bell, drums and epic singings can be heard. *Morshed* is the name of a spiritual guide who directs the activities, uses a drum and a bell. (Hosseini, 2004) *Zurkhaneh* is not Tehran's specific heritage but this sport has been also practiced in other cities as well. However Tehran champions and *Zurkhanehs* are famous among the others. The bell, *Morshed's* epic songs and drum-like instrument all together shape *Zurkhaneh* beat. A musical beat that is known for its uniqueness. (Palm, 2004) This sport follows an interesting and special rhythm and *Zurkhaneh* sounds can definitely be considered as touristic sound attractions.

Another sound that was mentioned during the data collection, was *Shahre-Farang*. *Shahre-Farang* simply means Foreign-City. *Farang* originally meaning France, was a generic term for Europe. Iran's cultural contact with west in the nineteenth century was first with France and *Shahre-Farang* was a big box on a wheelbarrow that a hawker used to push in the streets while shouting: "Come and see the *Shahre-Farang!*... Travel with me to the land of *Farangi* and see its marvels!..." (Guppy, 2004) *Shahre-Farang's* sound is another survived sound in the historical memory of Tehran Citizens. Due to the role of a hawker to shout about his presence, *Shahre-Farang* can also be included in Human sounds category.

2- *Natural sounds:* The sort of sounds in collected interviews, like Bird sounds such as crow and myna and sound of water in raceways were some of the natural ones. One interviewee sorted Tehran sounds by their seasons. Rain in spring, rustles in autumn, automobile horn in summer (industrial obtrusive sound), and finally silence and crow in winters. Although natural sound plays a role in urban sounds but they can be found in nature and cannot be considered as urban sound attraction.

3- *Human sounds:* *Azan*, the Muslim call to prayer is one of the sound attractions in Tehran. But this sound does not only belong to Tehran and it can be heard in other cities and even in other Muslim countries. This particular sound can be suggested for Qom that is the centre of Islamic studies and it has a religious function amongst other cities. It can also be mentioned that the way people talk counts for distinguishing where they are coming from. In this case Tehran peoples' accent is distinguishable by

internal travellers. Another sound that does not come out instantly from human throat but is produced by human actions is sweeping. Tehran’s sweepers mostly work during the midnight and some people are familiar with their presence in the street. A tourist said “It was midnight and I was awake, then I heard a sweeping sound, it was nice to know that someone else is also awake in middle of the night”.

5. Audio Tourism: Isfahan Case Study

Isfahan is an ancient city with innumerable historical monuments and it’s one of exemplar touristic cities known in the world. (Culture", 2014) As mentioned before, 14 people were interviewed during the first time and 14 during the second. Among the first interviewees there were 8 tourists and 6 citizens. Second time we interviewed 7 tourists and 7 citizens. The location for these interviews were *Naghsh-e-Jahan*⁶ square for the first interview. Particular sounds can be heard in this square, to study whether those mentioned sounds by the interviewees were at the same soundscape or not, we decided to interview for the second time in Flower-Garden.

Findings in Isfahan: Isfahan sounds can be categorized in three groups by their natural or descriptive resemblance.

Table 2. Isfahan Sound Categories

<i>General Categories</i>	<i>Data</i>
<i>Natural</i>	Zayanderoud river, Birds, leaf rustles in Chaharbaq
<i>Artificial</i>	Carriage in Naghshe-Jahan square, Bicycle and its bell ring, Coppersmith engraving in bazaar, Ali Qapu musical instruments, Vank Cathedral bell,
<i>Human</i>	Accent, Singing under the bridges, Imam mosques’ echo stone

1- *Natural Sounds:* Isfahan natural sounds on the basis of gathered data can be grouped in three subcategories: Water sound, Bird sound and rustle of leaf during autumn. Water sound were suggested by both tourists and citizens because of *Zayanderoud* River which recently is drying out to keep its memory as a great river. Fountains and drops of water were the other water sounds that can be heard in *Naghsh-e-Jahan* square in Isfahan. Sound of the nature has always been an attraction to the people but these sounds need to be heard in their true environment in nature to be considered as attractions.

2- *Artificial Sounds:* These sounds are made by human’s activities or brought to the place intentionally. The most repeated sound heard by tourists that described their sound perception of Isfahan is described as “Imam square⁷ carriage sound” as a desirable nostalgic sound. The second sound mentioned is coppersmith etching and engraving sound in bazaar which make a special sound is bicycle bells and spokes sound in the city. *Vank*⁸ Cathedral bells. And the last mentioned sound in this category was a suggestion made by one of the interviewees to reconstruct the sound of music of *Ali Qapu*⁹ Palace, by using the same musical instruments which were used back then in this Palace.

3- *Human Voice:* Singing under river bridges in Isfahan is known as citizens’ habit. People gather around the person who is singing, show their applause or disproof to the singer. Another indicator that distinct Isfahan is *Isfahani* accent which is recognizable for internal voyagers and also tourists by knowing some little information will come to notice it. In *Naghsh-e-Jahan* square, there is a mosque

named Imam. In this mosque there is a stone under the dome on which whoever stands and talk, his voice will reflect louder.

6. Audio Tourism: Mashhad Case Study

Mashhad is the second religious metropolitan in Muslim countries. It is located in northeast of Iran. (History", 2014) This city has its reputation by having the shrine of *Imam Reza*¹⁰ in its soil. This city has the first position among the rest religious cities in Iran for having millions of visitants and pilgrims every year. (History", 2014)

Location and People: In order to gather information about sound perception in this city, two interviews were done in two locations. The first interview took place in *Bazaar-e-Reza* and 15 people were interviewed 9 pilgrim and 6 citizens. The second interview was in Mashhad railway station again with 15 people including 9 pilgrim and 6 citizens.

Findings in Mashhad: On the basis of the collected data we can group Mashhad sounds in two categories.

Table 3. Mashhad Sound Categories

<i>General Categories</i>	<i>Data</i>
<i>Relevant Sounds to Imam Reza’s Shrine</i>	Naqare-Khane: Naqare and drums, Shrine’s clock, pigeons, Prayer and invocation
<i>Other sounds</i>	Different accent of pilgrims, Train sound

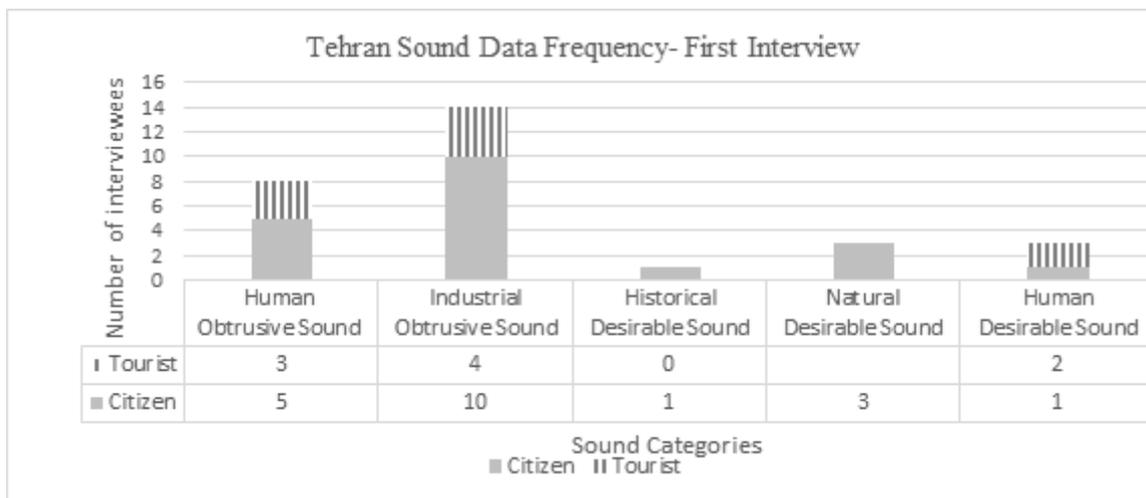
1- *Relevant Sounds to Imam Reza’s Shrine:* The interesting fact in data collecting is that all the suggested sounds are somehow related to *Imam Reza’s* holy shrine. The first sound mentioned in the interviews that can truly recognized by many in Iran is the sound of *Naqare-Khane*¹¹ which is the sound of a sort of trumpet and drums played in *Imam Reza’s* shrine. This musical instrument has a very specific sound and it is usually played with drums. Once this sound is heard in the shrine it will represent a nostalgic role and all the interviewees mentioned that when they go to the shrine they try to be there in those specific hours to hear that sound. The other mentioned sound is the sound of praise and invocation to God which can be heard in the shrine and as one interviewee mentioned “I like the spiritual experience to be among many others and hear their voices praying together or individually”. There are some places made for pigeons in the Shrine and many interviewees mentioned the pigeon sounds and their fluttering. Another sound that can be heard in Mashhad is *Azan*, so as in other cities. There is a clock known as shrine’s clock and the sound of its strikes was mentioned by interviewees. Monody and dirge were the last mentioned sound.

2- *Other Sounds:* In this category two sounds were mentioned by the interviewees. The interesting point is that even these sounds were explained in relevance to the shrine. The first sound is train’s sound to represent Mashhad and the reason mentioned by the interviewee was “because I always trip to Mashhad to go to *Imam Reza’s* shrine by train. So trains remind me of Mashhad”. The second sound mentioned by a visitor/tourist was the sound of different accents that can be heard in this city because of the huge number of pilgrims that come to visit the shrine.

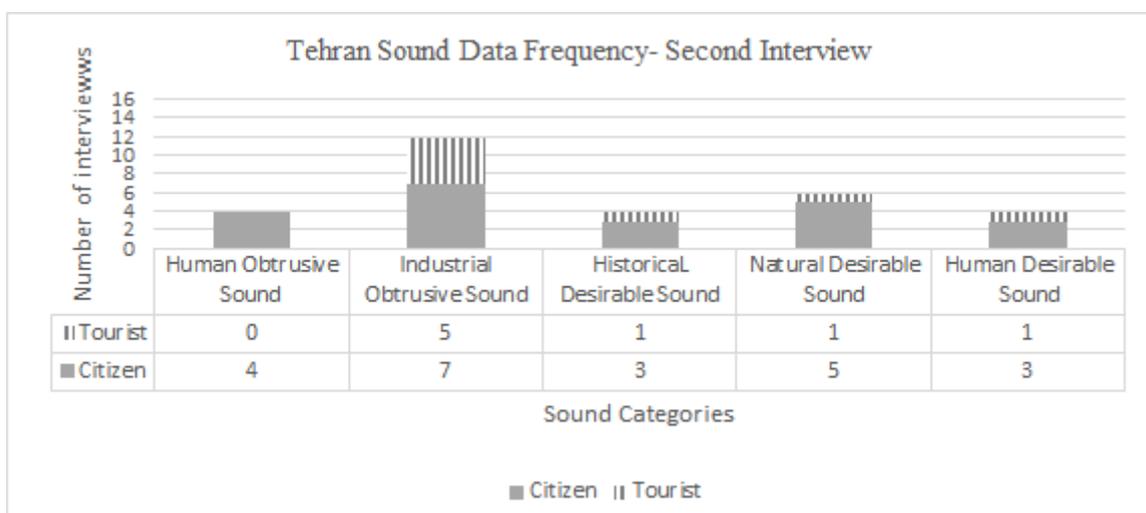
Discussion

‘Urban environments are heavily impacted by road traffic, where motor vehicles constitute a major source of air pollution in large cities.’ (Xia and Shao as cited in Antonio J. Torija & Diego P. Ruiz, 2012) But it is possible to find desirable sounds for cities. Finding an attractive urban sound for cities such as Tehran seems impossible first. Even the majority of the interviewees couldn’t mention any sounds other than sound pollutions for Tehran. (Histogram 1&2) But in this research the quantity and the repetition of data didn’t play a great deal, while the quality of the given information was important. Among the interviewees in Tehran only a few people pointed out some sounds that belong to the historical memory of the city. Although these sounds are not mentioned by all the interviewees, but these sounds are not completely vanished yet and with a little bit of attention they might come back to people’s sound perception of the cities. *Zurkhaneh* and *Shahre-Farang* are among these sounds. Tehran case study shows that some of the sounds were considered intrusive years before but in comparison to the modern sound pollutions they seem nostalgic and desirable these days to the elders. Sounds like the *town criers* such as *Namaki* and *Lahafdoози* are among these sounds that have shifted their function from intrusive to desirable.

Histogram 1. Tehran Sounds Data Frequency- First Interview- winter

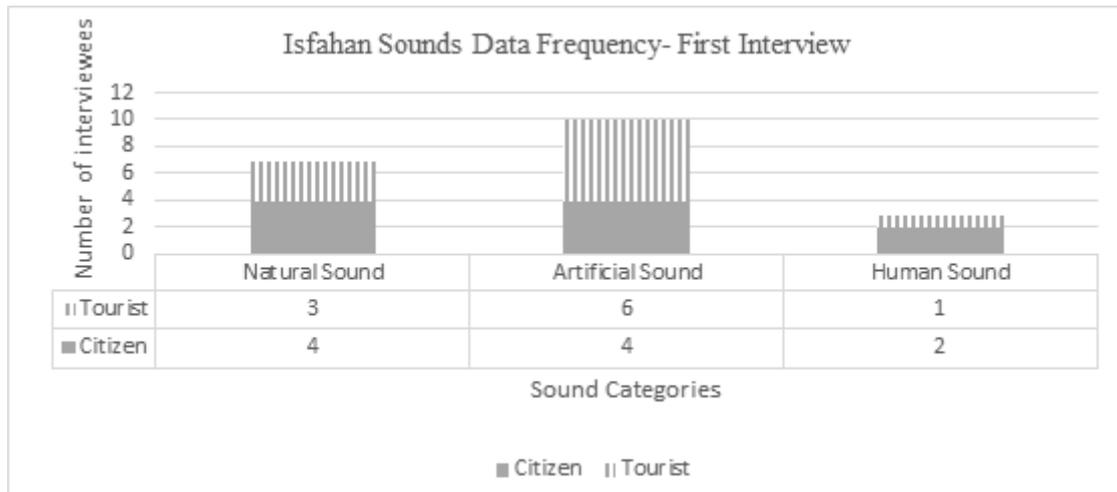


Histogram 2. Tehran Sounds Data Frequency- Second Interview- spring

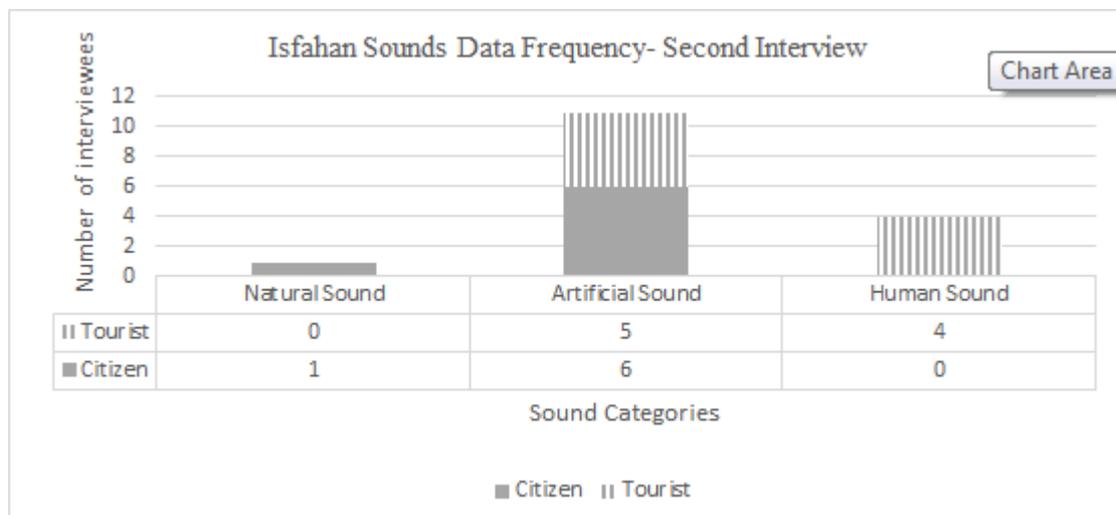


In Isfahan however, the sound perception of the citizens differ in some aspect from the tourists. (Histogram 3&4) Tourists mostly mentioned the sound of *Naghsh-e-Jahan* square's carriage, while citizens didn't mention

Histogram 3. Isfahan Sounds Data Frequency- First Interview- winter



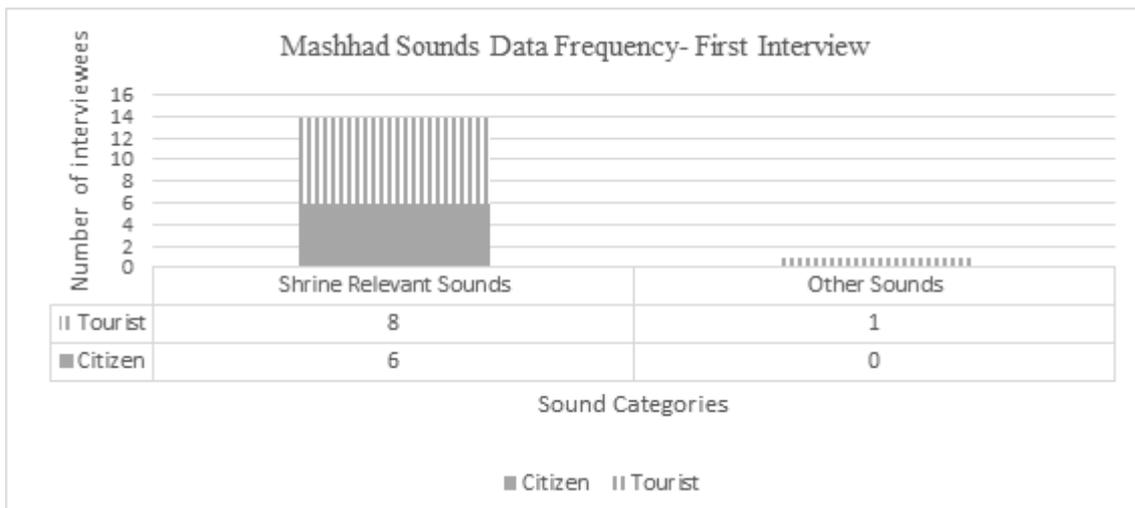
Histogram 4. Isfahan Sounds Data Frequency- Second Interview- spring



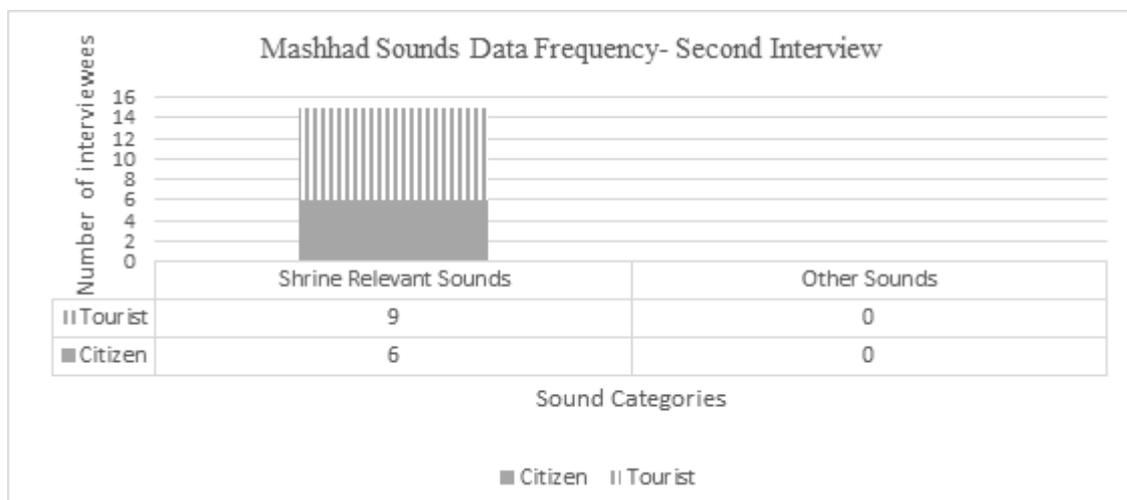
that sound even once. Both citizens and tourist mentioned coppersmith engraving sound as it is the handicraft of Isfahan. The interviews in Isfahan were done in two locations. It was thought that the most tourists were mentioning the carriage sound because they were interviewed in *Naghsh-e-Jahan* square and might be affected by the location while they are hearing the carriage voice. Thus the second location was an approximated neutral sound location. But the results were the same and tourists kept mentioning the carriage sound. Therefore, there were one attractive sound (carriage) mentioned by tourists and another sound mentioned by both tourist and citizens (coppersmith engraving sound) in Isfahan. Other sounds were also

mentioned that can be added to Isfahan sound characterization. Mashhad particular sound was found out easier than the two other cities. (Histogram 5&6) Both citizens and tourists agreed on *Naqare-Khane* sound as the main sound attraction for this city.

Histogram 5. Mashhad Sounds Data Frequency- First Interview- winter



Histogram 6. Mashhad Sounds Data Frequency- Second Interview- spring



One of the tasks of audio tourism is to find attractive sounds for touristic cities. Some of these sounds are fading out with passage of time and audio tourism in relation to other disciplines such as anthropology and folklore will be able to gather these sounds before they vanish from people’s mind forever. Cultural phenomenon and information only can be conveyed through human relations. The concept of human relation hasn’t changed in meaning but is changed with the new sort of media. Audio information are being conveyed not only through radio, but also podcasts as a new medium made this process faster and easier. “Due to Podcasting’s natural characteristics of low entry barriers and high flexibility in the delivering rich-media

content, it has been treated as a new medium for modern travellers.” (Chang, Jang & Chiu, 2012)

Limitations: Tehran as a metropolitan was the most complicated city in collecting data. Despite the social classes, region of living and other factors, the first given sounds by the interviewees were urban distracting noises such as car horn, high speed sound of cars, car brake and other related traffic and transportation noises. The other complication in gathering the information was the various ethnics that are living in Tehran and their historical memory hasn't shaped with the city's historical background yet.

Urban citizens and tourists cannot be interviewed easily due to time limitations. Urban citizens are normally in rush due to their speed of life and tourists have a limited time. Therefore the questions were prepared to ask in a way accurate to their speed of life and to respect their precious time.

Doing field studies and making trip to other cities is time consuming and in every research, there is a financial limitation. Both of these problems, caused some difficulties in realising this research. Some tourists were not familiar with the sounds in the city they were visiting since it was their first time of visiting. And some of the mentioned sound had no valuable touristic attraction to be used in audio tourism.

Implementation: Sounds of a city can be introduced to the tourists before and during their trip to a city or even after. It's important that the citizens get familiar to their own sound heritage first to be able to convey it afterward. Therefore, introducing these sounds through websites, podcasting, radio and television would be helpful. For instance the sound of *Naqare-Khaneh* is well-known in Iran as it is being broadcast time to time through Radio and Television. Other sounds can come to people's memory by doing the same. The citizens should recall these sounds as their own *city personality*. Because if the citizen won't recall their own city's sound heritage they won't be successful to convey it to the tourists and travellers. “Although traditional guidebooks contain valuable references for travellers, Podcasting provides users an easier and more convenient and flexible way to acquire necessary information for their trips.” (Chang, Jang & Chiu, 2012) Making podcast applications presenting these sounds will be a useful idea to be used in websites, weblogs, travel agencies, gift shops and other places.

Conclusion

Although further studies will enhance the qualitative studies, this research has reached its aims. The findings show that desirable sounds can be for the three cities of Tehran, Mashhad and Isfahan to be used as audio attractions and audio tourism. The answer to the feasibility of creating urban audio tourism is *positive*, but it differs in quantity for each of the cities. Tehran as the capital city, needs many other field researches while Mashhad seems to have one outstanding sound.(Table 4&5)

Table 4. Mashhad sound variable by case data matrix: First interview

Age	Gender	Status	Sound	
1	25	F	Tourist	Naqare
2	43	M	Citizen	Azan, Naqare
3	15	F	Tourist	Naqare
4	57	F	Tourist	Different accents and train sound
5	48	F	Citizen	Naqare
6	39	F	Tourist	Naqare
7	26	F	Tourist	Spiritual calmness in the Shrine
8	14	F	Tourist	Naqare
9	32	F	Tourist	Pigeons' fluttering in the Shrine
10	19	M	Tourist	Azan in the Shrine
11	34	M	Citizen	Naqare, prayer
12	60	F	Citizen	Naqare
13	18	F	Citizen	Naqare
14	23	M	Citizen	Naqare
15	17	F	Tourist	Azan in the Shrine

Table 5. Mashhad sound variable by case data matrix: Second interview

Age	Gender	Status	Sound	
1	29	F	Tourist	Naqare
2	26	F	Citizen	Naqare
3	45	M	Citizen	Naqare
4	32	F	Tourist	Naqare, pigeons
5	43	F	Tourist	Naqare and drums
6	39	M	Citizen	Naqare
7	17	M	Tourist	Naqare
8	23	M	Citizen	Prayer and invocation, Naqare
9	34	M	Citizen	Shrine's clock bell, Pilgrims' voices praying, Naqare
10	67	F	Tourist	Naqare, monody and eulogy
11	36	F	Tourist	Naqare, pigeons, azan
12	36	M	Citizen	Pigeons, Shrine's clock bell, people's whispering prayers
13	28	F	Tourist	Naqare
14	23	F	Tourist	Naqare
15	28	F	Tourist	Naqare

From Tehran categories discussed in the text, this research suggests two historical sounds for Tehran which are *Zourkhaneh* and *Shahre-Farang*. For the touristic city of Isfahan two special sounds can be suggested. First sound which both tourist and citizens are familiar with is coppersmith engraving sound (in bazaar ambience). The second sound which was suggested by tourists is the *Naghsh-e-Jahan* carriage sound. And for the city of Mashhad the sound of *Naqare-Khane* is the unique suggested sound. (Table 6&7)

Table 6. Isfahan sound variable by case data matrix: First interview

	Age	Gender	Status	Sound
1	40	F	Citizen	Zayanderoud river
2	26	M	Tourist	Birds
3	47	F	Tourist	Carriage
4	32	M	Tourist	Carriage
5	16	F	Tourist	Carriage
6	30	F	Tourist	Zayanderoud river
7	21	M	Tourist	Water fountain
8	56	M	Citizen	Coppersmith making, Zayanderoud river, Bazaar crowd
9	40	F	Citizen	Water drops, bicycle and its bell
10	55	M	Citizen	Crow, Zayanderoud, Coppersmith
11	42	M	Citizen	Singing traditional songs under the bridges, bicycle
12	16	M	Tourist	Coppersmith
13	25	F	Tourist	Carriage
14	32	F	Tourist	Carriage, coppersmith, Singing traditional songs under the bridges

Table 7. Isfahan sound variable by case data matrix: Second interview

	Age	Gender	Status	Sound
1	35	M	Citizen	Zayanderoud river, Leaf rustle in Chaharbaq
2	28	F	Tourist	Accent, carriage
3	23	F	Tourist	Traditional sounds, Ali Qapu musical instruments, Imam mosque's echoing stone
4	31	M	Tourist	Carriage
5	46	M	Tourist	Carriage, coppersmith engraving sound in bazaar
6	29	F	Tourist	Carriage, Accent
7	33	F	Citizen	Bicycle bell, Coppersmith engraving sound in bazaar
8	25	F	Citizen	Coppersmith engraving sound in bazaar
9	37	F	Tourist	Carriage
10	36	M	Citizen	Vank cathedral bell, Carriage, bicycle ring
11	37	M	Citizen	Bicycle bell ring, Coppersmith making sound
12	51	F	Tourist	Carriage
13	35	F	Citizen	Coppersmith making, Zayanderoud river
14	42	M	Citizen	Coppersmith making, bicycle

One of audio tourism tasks is to obtain the historical and touristic urban sounds in cities to be introduced through radio, podcasts, tourism websites, tourism agencies, gift shops and other possible ways. All these sounds can be used in different audio medium. Social networks and podcast are the best interactive media for these sounds to get through and being shared. This research suggests further studies in Tehran and the questions to be asked from elders. As the findings show (Table 8&9) the elder citizens might point out some sounds from historical memory of the city and if no one collects these data they might vanish from *city personality*. Elder citizens have valuable information because of their rich *historical memories*, they are a great resource for collecting information. This study also can be done in any other village, city or country throughout the world

Table 8. Tehran sound variable by case data matrix: First interview

	Age	Gender	Status	Sound
1	31	F	Citizen	Car horn, automobile high speed sound, car brake
2	34	F	Citizen	Car horn, car brake, birds: crow and myna
3	30	F	Citizen	Car horn, Helicopter sound
4	40	M	Citizen	Pigeon, car horn, car brake
5	35	M	Tourist	Azan
6	29	F	Citizen	Harsh sound, car horn
7	36	M	Citizen	Crowd, car horn
8	27	F	Citizen	Car horn, Shout
9	30	F	Citizen	Truck, crow, sweeper
10	21	M	Tourist	Car horn, crowd, Congestion
11	15	M	Tourist	Sound pollution: car horn, crowd
12	25	M	Tourist	People's voices, uproar
13	38	M	Tourist	Car sounds, Azan
14	27	F	Citizen	Noise, Car, Bustle
15	24	M	Citizen	Theft-device, Car horn
16	65*	M	Citizen	Zurkhaneh

* Elder citizens as historical memory of the city

Table 9. Tehran sound variable by case data matrix: Second interview

	Age	Gender	Status	Sound
1	37	Tourist	F	Car, crowd, high speed cars
2	24	Citizen	F	Season: Rain/Spring, Car horn/Summer, Crow & silence/Winter, Leaf rustle/Autumn
3	30	Citizen	F	Uproar, Metro crowd, car horn, Bazar crowd and coolies who say open the way
4	23	Citizen	F	Uproar, traffic noise
5	31	Citizen	M	Dynamism, no silence, car horn, crowd
6	26	Tourist	M	Traffic noise, car horn, noise, crowd
7	29	Citizen	F	Traffic, car horn, noise
8	24	Tourist	M	Traffic, uproar, car horn
9	45	Citizen	F	Namaki
10	29	Tourist	M	Accent, Traffic
11	23	Tourist	M	Accent, car horn, airplane, sweeper
12	36	Citizen	F	Kids sound, silence
13	*52	Citizen	F	Shahre-Farang, water raceway, car horn, traffic
14	45	Citizen	F	Church bell, silence
15	38	Tourist	F	Crowd, Rain
16	36	Citizen	M	Bus, old carriage, town criers, hawkers, Namaki, Lahafdoози, crowd, water raceway

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Endnotes

1. Tehrans'Old Bazaar is located in distric 12 known as historical part of the city. ("Region 12", 2014) This Bazaar with its other monuments is one of the most important artistic and historical attractions in Tehran.
2. TajrishThis Bazaar is located in distric 1 and is also one of the ancient places in Tehran. Tajrish Bazaar is one of the oldest markets in Shemiran district and it still maintain its ancient appearance. (Mollahosseini, 2011) Many tourists and citizens visit this Bazaar everyday as visitors or quotidian citizens. This Bazaar is located in the north of the city.
3. Town crier is a person who talks out loud or shout in the streets to sell goods.
4. Namaki literally means Salty. This term is referred to a person who collect used breads from homes in exchange of Salt.
5. Zurkhane literally means Power house. It is a place to gain strength, reinforce the virtues of sportsmanship, modesty, humbleness and avoid arrogance.
6. Naghshe-Jahan square literally means" image of the world" square. This square is a masterpiece of urban construction situated at the heart of the legendary city of Isfahan. (Organization", 2012)
7. Imam square is the recent name for Naghshe-Jahan square.
8. Vank means monastery in the Armenian language.
9. Ali Qapu is a grand palace in Naghshe-Jahan square in Isfahan. In its sixth floor there is a music room which deep circular niches are found in its walls, having not only aesthetic value, but also acoustic.
10. Imam Reza is Shi'ites' eight Imam lived 765-819 A.D- . Shi'ites have 12 Imams and Imam Reza is the only Imam buried in Iran. (Biography of Imam Reza, 2004)
11. Naqare-Khane literally means the house of drums. This place in Imam Reza's shrine is dedicated to play musical instruments in specific hours.

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