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IS THE RESIDENTIAL LAND USE INCOMPATIBLE WITH CEMETERIES LOCATION? ASSESSING THE ATTITUDES OF URBAN RESIDENTS

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Abstract: Incompatible land uses are a major source of potential degradation at the urban level. Knowledge about land uses compatibility can be a useful guide for planners and local authorities to manage the existing issues and to generate social, environmental and economic welfare without degrading the environment. In this study we identified the potentially conflicts that can appear between cemeteries and adjacent residential land uses and provided alternatives that might alleviate them. The paper improves the understanding of people's demands regarding the management of issues caused by cemeteries. We demonstrated that an increased probability of negative perception regarding a cemetery location is found for those people who are older, perceive more than one issue in relation to the cemetery, live within eyesight to a cemetery and have educational or non-technical jobs. These results point out important physical and psychological interactions between people and their local environment. Knowledge about these interactions can be used by local authorities to understand urban conflicts and provide useful insights for improving urban sustainability.

Keywords: affectedness; attitude; land use conflict; spatial planning; city;

1. INTRODUCTION

Conflicts over land use often occur in fast changing urban regions. Cities are associated with high mobility (Antrop, 2004) and tend to consume enormous resources to ensure their sustainability (Newman, 2006). Thus land-use change has increased and incompatible spatial arrangements have rapidly developed in many urban regions.

Land-use conflicts result from incompatible land uses (Gresch & Smith, 1985), and occur mainly in highly accessible zones, e.g. city centers, and in urban fringe areas (Janelle & Millward, 1976). Conflicts arise from encroachment of residential area upon urban services originally located in the site (Feitelson, 2000). We focus in our analysis on cemeteries as a potentially conflicting land use in relation to adjacent residential neighborhoods.

In many parts of the world, cemeteries do not represent a source of conflict. For example, in Zürich, cemeteries are used as parks for relaxation and reflection, and are appreciated for their peaceful atmosphere and cultural value (Zürich, 2012). However, many studies on attitude to cemeteries (Uslu, 2010) stress hygienic-sanitary (Santarsiero et al., 2000) and environmental problems (Fiedler et al., 2012; Jonker & Olivier, 2012), as well as planning issues (Basmajian & Coutts, 2010).

In Romania, the rapid urban expansion of big cities, undersized green spaces within cemeteries and their poor administration have led to the development of unsafe and unsanitary areas within and around cemeteries. Cemeteries have become areas associated with environmental problems that can generate a stressful landscape and neighborhood conflicts (Suditu et al., 2010) due to their location

and management, as well as specific burial processes with their customs.

The implementation of spatial management and planning techniques to optimally solve problems arising from conflicts over land use is a key objective of Agenda 21 (Chapter 7 - Promoting sustainable human settlements development) and the Habitat Agenda (UN, 1992). It is also essential for ensuring economic vitality, social equity and ecological integrity in cities to promote the respect for environment (Ianos et al., 2009). Management can take a positive approach to managing conflicts (Gresch & Smith, 1985) or develop alternative spatial arrangements (Hersperger, 2006) to alleviate the conflicts and lead to effective spatial planning. Deterioration in local well-being (von der Dunk et al., 2011) correlated with poor urban planning is one reason for locational conflicts occur. In this context, people's perception has an important place in planning because it can throw light on relationships between humans and the landscape they live in (Antrop, 2004) and help to identify what the local population view favorably or unfavorably about it (Wallner et al., 2007).

People relate to the landscape they live in, reflecting on it (Lee et al., 2008) and on land-use decisions that affect what they see (Hur et al., 2010). Such perceptions tend to vary over time depending on the social, economic and political context, land coherence (Oshio & Urakawa, 2012), individual or group preferences (Antrop, 2004), satisfaction level (Hur et al., 2010) and the action of external factors (Pampalon et al., 2007). Here we focus on assessing people's perceptions of issues because they can provide insights into very complex situations (Lee et al., 2008). Although they are quite volatile (C. Ioja et al., 2011), people's perceptions can yield basic information for improving well-being through managing people's health and environment (Stronegger et al., 2010).

How issues are perceived is important for spatial planning since most land uses exert negative issues. These issues can be physical (degradation or abandonment of a built-up areas, empty buildings), environmental (noise, traffic, odors, air pollution), institutional, e.g. lack of infrastructure and facilities (transportation, recreation, culture, water, sewage system) or social (vandalism, drug consumption, crime) (Echeverria et al., 2008). Perceptions of issues can be negatively associated with health problems (psychological illnesses), psychosocial and psychological issues (immunity and self-esteem), health behavior and some mediating variables (feelings of fear) (Pampalon et al., 2007). Perceptions of issues often depend on the distance between residential areas and the source of the issue (Lima, 2004), residents' social and economic status (Popescu & Gavris, 2012), recent occurrence of issues in residents' local area (Ceobanu & Grozavu, 2009) or local interests in spatial planning (Lindemann-Matthies et al., 2010). Solving problems efficiently can improve well-being and lower the risk of conflicts or other social, economic and environmental problems developing (Peltonen & Sairinen, 2010).

Since cemeteries in Romania are often associated with problems, the goal of this study was to explain people's perceptions of issue in relation to some cemeteries in Bucharest, Romania and how satisfied they were with the cemeteries' locations. To achieve this we investigated: (1) 'Which issues are perceived as most problematic?'; (2) 'Which factors explain why a person seems to feel affected by a cemetery's location?' and (3) 'What people think about the locations of cemeteries?'

2. METHODOLOGY

2.1. Study area

Bucharest is located in the Romanian Plain, about 60 km North of the Danube River, in an area with loess and alluvial deposits (Mandrescu et al., 2007). Bucharest's climate can be considered Continental temperate, with a mean annual temperature of 11.2ºC, and a mean annual precipitation of 613 mm. Urban heat island effects may occur (Cheval & Dumitrescu, 2008). Bucharest has the largest population concentration in South-East Europe with 1.9 million inhabitants, which represents 9% of the country's population. It covers a total area of 238 km². Most of the population is of Romanian ethnicity (96.9%), and 96.1% of them are Orthodox Christians. Although Bucharest is the main Romanian economic (20% of Romania's GDP) (Nae & Turnock, 2010), cultural and political center, its peripheral position in relation to the major European infrastructure axes means it is one of Europe's cities with a low potential for development (Popescu & Gavris, 2012).

Currently, Bucharest's landscape is strongly affected by an ongoing effort to transform the rural landscape into an urban and social one (Popescu & Gavris, 2012), and new residential projects in relation with inadequate land uses are having a strong environmental impact (Ianos et al., 2012; Niculita et al., 2011). Bucharest's landscape has changed since 1990; many industrial sites and collective settlements (tall blocks of flats) were built specifically in the communist period. After the fall

of communism, industry declined and the unplanned development of many built areas both commercial and residential has followed (Suditu et al., 2010).

These changes in Bucharest's landscape have led to a reduction in urban green areas, an increase in urban density and traffic, as well as more areas with poor sanitation and incompatible land-use arrangements. Currently, green spaces and water constitute 13.8% of Bucharest's surface area, built-up areas 57% and agricultural areas 18.3% (most of these are however unused). The remaining percentage is covered by roads and railways. Most cemeteries belonged to rural communities but are now surrounded by a dense urban fabric.

There are 42 cemeteries in Bucharest, of which 12 are municipally owned and 30 belong to churches or are privately owned. They occupy 0.90% of Bucharest's total surface area (213 ha). Depending on who owns the land, managing cemeteries is the responsibility of the City authorities (through the Cemeteries and Crematoria Office), the churches of different religious denominations or private owners. Municipal cemeteries have permanent security guards and access is strictly controlled.

In terms of size, the largest cemetery in Bucharest is Bellu, which has been in use since 1858. It is a municipal cemetery included in the European Cemeteries Route (ASCE), covering a total area of 27.6 ha. The smallest cemetery is Baneasa, a parish cemetery. It was established in 1864 and covers a total area of 0.49 ha (Fig. 1).

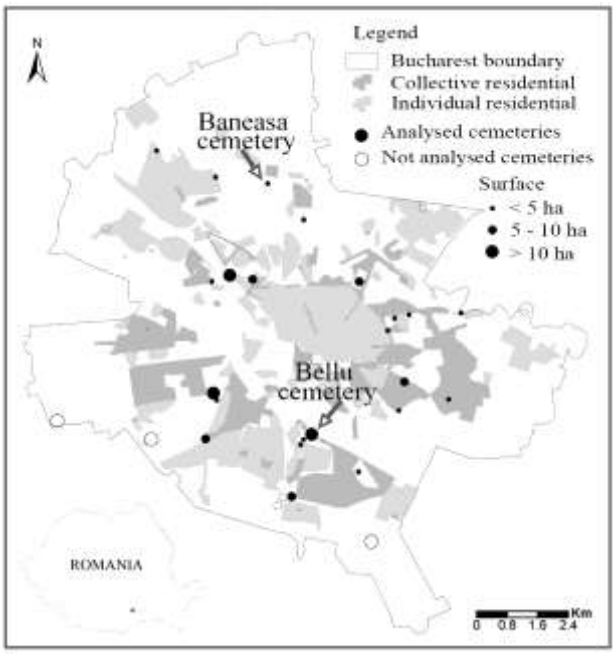

Figure 1 Map of Bucharest city showing the location of cemeteries

2.2. Research strategy and questionnaire design

To gain insights into the spatial distribution of Bucharest cemeteries and to determine their surfaces and adjacent land use, we used cadastral plans from 2008, scale 1:2000 and GeoMedia Professional. People's perceptions were assessed using written questionnaires. The study was conducted on a randomly selected sample of 23 cemeteries, representing 58% of the total number of cemeteries, and covering 138 ha (0.58%) of Bucharest's surface [μ = 6.01 ha, 0.49-27.6, $\pm$ 6.2].

Questionnaires with closed-ended and semi-closed questions, dichotomous and multiple choice responses (Table 1) were used for interviewing people.

Table 1. Questionnaire used at Bucharest cemeteries

Question	Answer
Perception of cemetery location and issues	
1 What do you think abou a cemetery being located near a residential building?	1. Indifferent/ 2. Not appropriate/ 3. Appropriate/ 4. There is no alternative
2 Do you personally feel affected by the any cemetery's location?	1. Yes/2. No/If yes, why? (open question)
3 What issues have you experienced in relation to a cemetery?	1. Noise/ 2. Insecurity/ 3. Odor/ 4. Waste disposal/ 5. Risk of disease/ 6. Nuisance animals7. Unorganized trade development/ 8. Aesthetic impact/ 9. There is no problem with a cemetery
Interviewees characteristics	
4 How far do you live from the cemetery?	1. Within view/ 2. Perception of some disfunctions/ 3. Not within view, no perception of disfunctions
5 Age	__years
6 Gender	1. Female/ 2.Male
7 Educational level	1. Primary education/ 2. Secondary education/ 3. High school education/ 4. Vocational training/ 5. Post high school apprentice/ 6. Tertiary education
8 Employment categories	1. Industry, trade/ 2. Education/ 3. Health/4. Security/5. Technical/ 6. Unemployed/ 7. Pensioner/ 8. Non-technical jobs
9 Interviewee's address	Street and number

We addressed people directly (face to face), in order to allow our influence, so that we could explain anything that people didn't understand (Marmureanu et al., 2011). Furthermore, people are usually more inclined to cooperate face to face (Lo & Jim, 2012) than by mail or email surveys (Bowling, 2005). We selected in random order people whom we asked the questions and subsequently we filled in their answers in the questionnaire. Most respondents were over 51 years old (54%), with roughly equal number of males (50.9%) and females (49.1%). In terms of employment, nearly 70% are employed and 42.53% with a high school diploma (Table 2).

Table 2. Interviewee characteristics

	Respondents no.	**%**
Gender		
Male	242	50.95
Female	233	49.05
Age		
0-18	15	3.16
19-35	150	31.58
36-50	111	23.37
51-65	116	24.42
over 65	83	17.47
Education level		
Tertiary education	158	33.26
High school education	202	42.53
Secondary education	43	9.05
Other	72	15.16
Employment category		
Pensioner	144	30.32
Education	85	17.89
Technical	77	16.21
Non-technical jobs	169	35.58
How close respondents live to a cemetery		
Within view	165	34.74
Perception of some disfunctions	231	48.63
No within view, no perception of disfunction	79	16.63

The distance between where the respondent lived and the cemetery was calculated on the basis of their home address supplied in the questionnaires. The address was placed on cadastral plans and the straight line distance calculated. The average distance from respondents' homes to the cemetery was 530 m [1-13147, ± 1359]. Most respondents live between 0 - 500 m (81%), 8% between 500-1000 m and 11% over 1000 m from the cemetery. We used distance as an indicator of the physical distance between respondents and cemeteries, measured in meters. Proximity was considered a measure of respondents' social interaction with the cemetery, expressed in terms of how well they could see it and the degree of contact they had with cemetery perceived issues (Table 1, Question 4).

Questionnaires were the source of information about people's perceptions regarding issues generated by cemeteries in the residential and urban ecosystem. We identified eight possible issues from the literature on cemeteries (Thorsheim, 2011; Uslu, 2010).

Respondents were asked to mention what issues they experienced due to the cemetery in question (Table 1, question 3). They could indicate further variants or respond 'there is no problem with a cemetery' explaining why, as we could have the opportunity to understand cemeteries potential benefits. The most common benefits were: cemeteries as useful spaces for recreation in summer, thanks to the trees that help cool the environment; cemeteries as places where poor people can get food; cemeteries as important link with people's emotions due to the psychological connection between them and their deceased relatives. We focused in our study only on people perceptions of issue in relation to a cemetery because cemeteries in Romania are often associated with human-environment issues.

2.3. Relationship between socio-demographic variables and people's perceptions of the cemetery's location

Logistic regression analysis was used to determine the contribution of five socio-demographic factors to explaining people's perceptions of whether they felt affected by a cemetery's location. Of the five independent variables (three continuous variables and two categorical variables) entered into the logistic regression analysis, only two continuous variables and three levels of categorical variables contributed to the final model. The dependent variable was binary coded. A value of 1 means that people felt affected by the cemetery's location and of 0 that they did not. Logistic regression was calculated using the following equation:

$$\ln\left(\frac{p}{1-p}\right) = B_0 + B_1 X_1 + B_2 X_2 + \ldots + B_k X_k$$

Where p is $P(y=1 \mid x_1, x_2, ..., x_k)$, i.e. the probability that a respondent would answer 1, B_0 represents the intercept (perception of feeling or not affected by a cemetery's location) and $B_1, ...B_k$ are coefficients associated with each predictor $x_1, x_2, ..., x_k$ (Poelmans & Van Rompaey, 2010).

The independent variables used in the model were: (1) respondents' ages, in years, measured as a continuous variable; (2) straight linear distance measured as a continuous variable, representing the distance in meters from respondents' homes to the cemetery; (3) the number of perceived issues by summing all issues perceived by each respondent; (4) proximity of respondents' home to a cemetery in three classes (i. respondents are within eyesight of a cemetery, ii. respondents perceive some issues, iii. respondents cannot see a cemetery and perceive no issues); and (5) type of employment according to eight categories (Table 1, question 8). The last two independent variables were entered as coded binary categorical variables, which were analyzed in relation to a comparison group, i.e. those respondents who neither see a cemetery nor perceive dysfunctions for the first variable and those who are unemployed for the second variable. A total of 469 cases were included in the logistic regression analysis. Six were excluded because data for some the independent variables were missing.

Model assumptions were met. The proposed model fits the data, the Hosmer-Lemeshow statistical test which established that the model is suitable for the analysis meets the condition that its significance value is greater than 0.05 (Andrade et al., 2011). To illustrate the results, we conducted the odds analysis of the predictors influence on the response variable. Statistical analyses were performed with SPSS 13.0 software.

3. RESULTS

3.1. Issues perceived as problematic

More than half of respondents considered minimum one issue in relation with a cemetery, while 42% thought there was no problem. The most commonly perceived issues were: aesthetic impact and nuisance animals (stray dogs and cats, rats and insects), waste (11%), noise (10%), odors (9%), unorganized trade (7%), risk of disease (5%) and insecurity (5%). There seems to be a tendency for people living closer to cemetery to perceive more issues. Those living within eyesight of a cemetery experienced more insecurity and felt more at risk of disease, but considered waste less of a problem than people living far from cemetery, who couldn't see it and who had not experienced any issues. The number of respondents is, however, too small for appropriate statistical tests.

More respondents (35%) perceived aesthetic impact with municipal cemeteries than with church or private cemeteries (24%). Furthermore, respondents younger than 15 years old reported feeling, in addition to aesthetic impact (50%), at risk of disease (50%).

We grouped all perceived issues in three impacts on human well-being, namely: *Urban landscape deterioration*, which related to the issues 'uncontrolled waste disposal', 'unorganized trade development' and 'aesthetic impact'. These issues impede positive connections between people and cemetery's landscape; *Health impact*: 'odor' and 'risk of disease' harm human health, which is a fundamental measure of human well-being. Many people consider cemeteries to be unhealthy places and a threat to health and *Management issues* 'noise pollution', 'insecurity' and 'nuisance animals', contribute to discomfort resulting in low well-being, affecting how secure people feel around the cemetery (Fig. 2).

Figure 2. Management issue: neglected infrastructure at Bucharest's cemeteries

3.2. Factors explaining affectedness

In the logistic regression model, pseudo R^2 (0.21) and the Cox & Snell (0.25) and Nagelkerke 0.38) suggest a fairly good explanatory power and a high percentage of correct predicted estimates (83.2%).

The two significant continuous variables are: respondent's age and the number of issues they perceive. The three significant categorical variables are: respondents who live within direct eye contact of a cemetery, analyzed in relation to the comparison

group of respondents who do not see the cemetery or perceive any issues; respondents who work in education and respondent with non-technical jobs (e.g. hairdresser, waiter, housekeeper), analyzed in relation to the comparison group of respondents who are unemployed (Table 3).

Table 3. Predictor variables influencing how much people feel affected by a cemetery's location

Predictors	B	SE	Wald	Exp(b)
Age in years	.032	.013	6.06*	1.03
Proximity			5.35	
Within eyesight	.956	.462	4.28*	2.60
Perceived issues	.433	.440	.968	1.54
Employment			12.35	
Non-technical jobs	1.74	.877	3.95*	5.71
Industry/trade	1.55	.802	3.73	4.71
Education	2.40	.806	8.86*	11.02
Pensioner	.776	.829	.877	2.17
Health	1.59	1.01	2.443	4.90
Security	1.39	1.05	1.755	4.04
Technical services	1.05	.796	1.759	2.87
Straight linear distance	.000	.000	.043	1.00
Number of perceived issues	1.00	.112	79.7**	2.73

*p<.05, **p<.01

The analysis of odds revealed how people's perception of feeling affected by a cemetery's location is influenced by predictors.

1. The odds of feeling affected by a cemetery's location are 0.18 times higher for a 65 year-old respondent than for a 20 year-old one.

2. Respondents who perceive three or more issues in relation with a cemetery are 7 times more likely to feel affected than one who perceives only 1 issue.

3. Respondents living within eyesight of a cemetery are 2-3 times more likely to feel affected than respondents who do not see the cemetery or perceive any issue.

4. Respondents who have non-technical jobs are 6 times more likely to feel affected than unemployed respondents.

5. Respondents who work in the field of education are 11 times more likely to feel affected than respondents who are unemployed.

Respondents who are most likely to be affected by a cemetery's location are elderly people living within eyesight of a cemetery, who perceive more than one issue in relation to the cemetery and are employed in educational fields or have non-technical jobs.

3.3. Satisfaction/dissatisfaction with a cemetery's location

From a total of 475 respondents, 473 answered the questions 'What do you think about a cemetery being located near a residential building?' with 4 options: 'Indifferent', 'Not appropriate', 'Appropriate' or 'There is no alternative' and the question 'Do you personally feel affected by the cemetery's location?' with two options: 'Yes' and 'No'. The results showed that 17% responded 'It is appropriate for a cemetery to be placed near a residential area'. 98.8% of this 17% claim not to feel affected by a cemetery's location. A total of 30% respondents in contrast responded 'It is not appropriate for a cemetery to be placed near a residential area'. More than a half, 58% of this 30%, reported feeling affected by a cemetery's location. The most frequent option mentioned was 'Indifferent' (34% of respondents). A total of 19% claimed that there was no alternative, and cemeteries had to be located near residential areas. More than 86% of respondents from the last two categories do not, however, generally feel affected by a cemetery's location.

The cemetery where location caused the strongest dissatisfaction (69% of respondents) is the Baneasa parish cemetery. It is the smallest cemetery in Bucharest, surrounded by a mixture of residential areas, water bodies, urban parks and vacant land. Respondents reported most satisfaction with the Damaroaia municipal cemetery (47% of respondents), which belonged in the past to a rural community, and which is now part of Bucharest city.

Sound management and strategies for integrating cemeteries into green urban infrastructure can reduce their nuisance. Table 4 shows how problems associated with the eight issues can be addressed through management and location options.

4. DISCUSSION

4.1. Cemeteries in the urban areas – conflicting land uses?

Bucharest's cemeteries are, according to our survey, creating conflicts.

Perception of aesthetic impact seems to be the main issue, and living within eyesight of a cemetery and experiencing its issues leads to it often being perceived negatively. People experience mostly as aesthetic impact such issues as nuisance animals and uncontrolled waste disposal, which are not generated exclusively by cemeteries.

Table 4 Measures to address issues causing problems around cemeteries

Issues	Description	Sound-management option
Noise	People are disturbed by the noise made during the traditional Romanian burial ritual where the deceased is accompanied to the cemetery by people crying and honking car horns leave-taking. Various practices after the burial are also a source of noise: requiems and other practices in remembrance of the dead.	Noise brings dissatisfaction and psychological effects among people (Mrkajic et al., 2010). Reducing such noise is a challenge for planners because it has to do with traditional customs. These traditions are part of the intangible culture and should be accepted as a constituent of local identity.
Insecurity	Cemeteries attract poor people (beggars, homeless people) and stray animals (especially dogs). When people are visiting the cemetery, they may feel insecure in case they are aggressively approached.	Insecurity can be eliminated by guarding the areas around cemeteries and limiting access to the cemetery.
Odor	Unpleasant odor may be emitted from waste and spaces used as public toilets around cemeteries.	Managing uncontrolled waste disposal and providing efficient cleaning and sanitation within and around cemeteries will eliminate odor.
Waste disposal	Waste disposal around cemeteries is common due to unorganized trade and the proximity of poor housing with inefficient sanitation systems.	Frequent waste collection by sanitation operators around the cemetery, providing poor households with access to sanitation services and increasing the number of waste bins will stop uncontrolled waste disposal.
Risk of disease	Risk of disease because cemeteries are considered to be microbiologically contaminated sites represents a perceived issue that affects especially those who live close to the cemetery (e.g. psychological effects).	Frequent analyzing the groundwater and soil quality, providing information about them and managing uncontrolled waste disposal will decrease the risk of disease.
Nuisance animals: dogs, cats, rats.	Stray animals are common in cemeteries. People are afraid of stray animals as they may be aggressive and their status as potentially vectors that can transmit various infections.	Maintaining fences, removing waste that could be a food source for stray animals and maintaining green spaces (along access paths, between graves and outside the cemeteries) will keep away nuisance animals.
Unorganized trade development	Along the fences merchants often sell flowers and candles illegally. They disturb nearby residents and cemetery visitors because these activities impair urban aesthetics, favor traffic congestion and generate waste.	Guarding cemetery and police surveillance especially on days when religious ceremonies take place will prevent the development of unorganized trade.
Aesthetic impact	Many people experienced aesthetic impact due to the lack of esthetic planning of the cemetery's surroundings, plants and neglected infrastructure.	Planting trees for aesthetic reasons, maintaining gravestones and tending existing trees and vegetation will alleviate aesthetic impact.

We associated an increased aesthetic impact with the typical vegetation found in cemeteries, which represent the culture of the place (Cloke & Jones, 2004) and is often not viewed favorably (Hur et al., 2010). Areas not considered according to the planting design principles decrease the visual quality of the landscape (Malkoc et al., 2009) and untended natural vegetation may increase the fear of crime and decrease overall neighborhood satisfaction (Nasar & Jones, 1997). It affects the physical and visual standing of the cemetery in the neighborhood (Thorsheim, 2011), and contribute to the cemeteries losing their aesthetic, spiritual and recreational value.

Second, we identified three impacts of cemeteries on human well-being: '*Urban landscape deterioration*' which explains why people often perceive a cemetery as incompatible with residential areas and not want to have one nearby. '*Health impact*' that are critical for human well-being evaluation and an indicator of perceived exposure of the population towards cemeteries (Santarsiero et al., 2000) and '*Management issues*', which may be a useful tool for discussing cemetery management issues in terms of environmental planning and possible changes in location to change the adjacency arrangement to facilitate good interactions and inhibit bad ones (Hersperger, 2006). People perceive

cemeteries to favor crime and attract homeless people and beggars (Paraschiv, 2012).

These findings may be useful for the local authorities about cemeteries and raise general issues affecting Bucharest's landscape. They should help future land-use decisions and the identification of the real causes of particular disturbances. Improvements in the management of cemeteries can reduce the level of perceived issues, and thus benefit the urban ecosystem.

4.2. Who feels affected?

Our third main finding was that older people perceive more issues and the people living within eyesight of a cemetery are most affected by its location. Our findings are similar with those of a study of attitudes to an incinerator plant (Lima, 2004) where the people who lived closer to the incinerator had higher levels of perceived risk. When such potentially hazardous facilities are very close to houses and people are more exposed to them visually, their psychological effect is greater. Cemeteries are not potentially hazardous in the same way (Coutts et al., 2011). The implications for spatial planning are that managing proximity in neighborhoods is very important.

Older people associate cemeteries more with insecurity than younger people. In other studies (Huppe & Weber, 1999; Sun et al., 2011), older people also appear to have more negative attitudes and stronger stress reactions than younger people toward certain land uses that may cause problems. In the current context in Bucharest, one reason for this negative perception of older people is that special infrastructure is insufficient for them, and this aggravates their negative attitudes. Thus it is essential to actively involve this age group in spatial planning in order to develop viable solutions and reduce the perceived issues.

We also found that people employed in educational and non-technical field tend to perceive cemeteries more negatively than unemployed people. Johnson and Scicchitano (2012) showed that people who are interested in environmental issues are more aware of the impacts of facilities. Furthermore unemployed people are sometimes less concerned about environmental protection (Veisten et al., 2004). Our findings do not support those of (Parkes et al., 2002) who found that economically inactive and low incomes people have a low degree of satisfaction with their neighborhood.

Some respondents associated no issue with cemeteries for religious reasons. Thus, the proportion of people who do associate human-environmental issues with cemeteries is probably underestimated in this study. Future studies should aim to assess where the main potential conflict areas are located at the urban level on the basis of perception assessment. For example, potential conflicts may arise from abandoning land and/or buildings, or developing them for intense commercial use.

Understanding people's perceptions of Bucharest's cemeteries involves improving the management of cemeteries and their proximities which will be loaded in a high valuation of cemeteries as green spaces. Interest in a landscape's spiritual dimensions (Hersperger et al., 2012) should also be taken into account in urban management. Understanding the causes of potentially conflicting land use (Cristian Ioja & Tudor, 2012) and driving forces behind them could help to save important resources needed in urban management and to ensure the space ethics (Ianos et al., 2010). Furthermore, the sustainable management of urban areas should endeavor to understand the preferences of different population categories and to adapt land uses functionality and structure accordingly to reduce spatial conflict.

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