
Teacher's Notebook

Using an Urban "Attractiveness Index" as a Method in Teaching College-Level Field Geography

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This exercise was used to illustrate the methodology involved in the collection and analysis of data from an urban environment, as part of a geographic field class at the University of Oregon. It was designed so that the students would be able to understand more about their surroundings through the examination of the components that make up an urban landscape. The class will also have a better understanding of how to design and execute fieldwork. Recognizing that others have used numerical evaluations of environmental quality (e.g., Craik and Zube 1976; Daniel and Boster 1976; Dingemans and Dattel 1979; Lounsbury and Aldrich 1986, 159; Stoddard 1982, 72), an exercise was developed in which students develop and apply a numerical index of "attractiveness" that reflected their perception of an urban environment. The project was designed for use during an all-day field class, which allowed for completion of the exercise in one day. This exercise could be completed in a series of shorter class periods if field sites were located close to the classroom.

The creation of an "index of attractiveness" is the initial task of the class. This index is to be applied in the field by the students and is to be generally acceptable to the students. The students are initially asked what kinds of features in the urban environment could be rated as indicators of the attractiveness of an area. These features must represent some kind of continuous data that could be rated from zero to five, with zero being unattractive and five being most attractive. The students are allowed to discuss the various attributes they find to be the best indicators. Discussion should be encouraged and a general consensus on at least 10 attributes should be the goal of the group. Examples of attributes include trash, the amount of vegetation, the maintenance of buildings, and perceived safety. Each of these attributes must be quantified during the field portion of the exercise. The attributes selected by a group may reflect the group's perception of urban settings. These attributes may be concrete (e.g., trash) or abstract (e.g., personal safety). This perception of an urban setting may be influenced

by different cultural and life experiences. These differences may not be apparent to the students until they have compared results in the classroom. It may become apparent that the attributes selected by the class are not well defined or are hard to quantify only after the class has been in the field. The instructor should be helpful and guide the discussion, but remain somewhat removed from the establishment of the final list of attributes.

Once the attributes have been determined the class should be divided into smaller groups (preferably groups that contain three to four students). Each group is asked to estimate the value of each attribute at some randomly selected sites. The sites can be selected by class members using some easily applied random selection method. The number of sites selected is dependent on the size of the urban area, the accessibility of transportation, and the time available. Five widely distributed sites can be visited in three to four hours if the students can be transported in vans. The sites themselves should be well defined before leaving the classroom. A site can be defined as both sides of a street, and depending on the length of the street, one or two blocks in length. At the sites the groups should be allowed to walk the entire distance of the site with little or no interaction between the instructor and the other groups. Each group should attempt to agree on a value for each of the attributes. Comparison of values between groups should be discouraged until the class returns to the classroom.

When the class returns to the classroom the values should be put on a blackboard or overhead in a tabular form by location for easy reference. These results can then be discussed by the class since differences and similarities between groups are readily apparent. The differences or similarities between groups can be the basis of a discussion of the advantages and disadvantages of this method of quantifying geographic variables in the field. Sources of differences can be associated with some factors such as inappropriateness of

the attributes selected in the classroom, bias on the part of the groups, or inattention to detail. The class should be able to detect these factors as sources of differences through a discussion of the variability in the indices. Additional comments can be added by the instructor where needed to illustrate a point. Some trends in the data may be detected and discussed or the lack of a clearly recognized pattern may be recognized. The whole experience can be summed up by the instructor or in some cases the class could be asked to write a paper about the exercise.

In practice the exercise was quite successful with the class, which was divided into four groups, visiting five sites in the Eugene, Oregon, area. The sites were both urban and suburban, with one site being nearly rural. The class used ten attributes. Both the selection of the attributes and the discussion of the values after returning from the field were productive and generated a great deal of discussion about the applicability of the attributes. The students found that the abstract attributes, which included aesthetic pleasure and personal safety, were hard to quantify and had the highest amount of variability. The more concrete variables such as trash and noise were easier to quantify, although some groups did not recognize distant noise sources such as freeways and rail-

roads. This is an exercise that makes the student an integral part of the learning process because of the "hands on" nature of the exercise.

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CONFLICTS IN NATURAL RESOURCES MANAGEMENT: INTEGRATING SOCIAL AND ECOLOGICAL CONCERNS

April 21-23, 1993

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