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### Thesis Prospectus

In my thesis I will analyze the determinants of variation in recycling behavior among the German states. I will be relying heavily on research published in 2001 by Guerin et al. In essence I will replicate their study but on a regional level within Germany as opposed to their cross-national level. Either their theory of how to explain recycling behavior will be upheld, or changes will need to be made to explain regional differences. At first I wanted to try to explain variation in recycling behavior, or why some people or countries might recycle more than others. When I found the article by Guerin et al., I thought it would be a good model to use to try to instead explain variation at the regional level.

I hypothesize that there will be clear distinctions between former East and West Germany because at the time the data was collected, 1995, only five years had passed since reunification. I am curious to find out if the formerly divided, capitalist-communist country will fit the Guerin et al. model or not. I am interested in what variation will be noticeable when recycling is studied on the regional, instead of country, level. This regional study could be done for any country; however, Germany's history makes it much more interesting. The country's division for almost 41 years will certainly still show division amidst the process of reunification. The separation within Germany is representative of Europe. It is an important country to examine when considering Europe since it is a link between Western and Eastern European countries.

To answer my research question, I will look at various independent variables and their individual and combined effects on the dependent variable—participation in the sorting of household trash for recycling. Both individual and contextual variables will be used to explain the variation, just as in the Guerin et al. study (195). Instead of examining the differences among

15 European countries, I will look at the 41 self-reported regions of the Eurobarometer 43.1, of which 31 are in West Germany and 15 in East Germany. Also included are the 16 German states, by which person-level data can also be grouped. The independent variables are quite similar to those used in the Guerin et al. study; however, some minor changes will be made so that their independent variables are applicable to the regional setting. The new independent variables used will still resemble those used in their study.

The person-level variables in Guerin et al.'s study were all based on questions from the Eurobarometer 43.1 survey (Reif). For example, an index was made from the sum of variables 135 to 140, each of which asks a question as to how much the respondent worries about a possible environmental problem, such as global warming or pollution (Guerin et al. 214). A higher score on the index "environmental concern" was shown on average to increase recycling behavior, since those who feel that the environment is at risk will be more likely to take action to save it (ibid. 199). This logic should still hold true at the regional level. The respondent's "ideology" was determined by another question on a scale in which he or she selected a number from one, the political "left", to ten, the political "right" (ibid. 214). I hypothesize that a lower score would correlate with a higher chance of recycling; however, Guerin et al. did not find a correlation between ideology and recycling (207). Guerin et al. also described that the perceived effectiveness of the government's care for the environment could affect a person's individual attempts (199). This variable was also determined by an index from a number of questions about different levels of government and their protection of the environment (ibid. 215). Guerin et al. found a "significant effect" of positive correlation on recycling behavior of the participants (207). I expect the same to hold true in my regional study.

Local activism was determined by a question in the Eurobarometer asking if the person had participated “in a local environmental initiative, for example, cleaning a beach or a park” (Reif Var 191). In a similar way, each person was asked if he or she was “a member of an association for the protection of the environment” (Reif Var 188). Both of these variables will likely support Guerin et al.’s theory that participation in these activities has a positive correlation with pro-environmental behaviors. Of the person-level variables, Guerin et al. found that local activism had the greatest effect on recycling participation (205). I expect that the same will hold true in my regional-level analysis.

Socio-demographic questions such as education, income, and age were included in the last person-level variables to see how much of an effect they have on pro-environmental behavior. From previous research Guerin et al. did not expect these factors to have very high rates of correlation (197). Education and income were both found in Guerin et al.’s study to have a slight positive relationship with recycling behavior (207). I expect to find the same conclusion because those educated to a higher level and those earning more have more knowledge, time, and money to invest in recycling. Younger participants (the youngest surveyed was 15) had lower chances of recycling perhaps because they do not own a home, but the effect of age was relatively small (ibid.).

Two other independent variables were taken into account on the national level in Guerin et al.’s study. These variables were seen as contextual, ones that describe not necessarily personal behavior, but why a country at large would be more likely to act in a certain way. In my study, I will look at how similar variables can influence participation rates of a given region. Guerin et al. examined “waste policy” by indexing various legislative indicators from the European Environment Agency (216). Just as perceptions of the government affect people’s

individual participation, the actual effectiveness of a government in caring for the environment can affect an entire region. This variable will likely need a different but similar variable in my study for the same effect to be understood at the regional level. The last independent variable in Guerin et al.'s research was country-level data about deforestation. They chose this variable to stand for "concrete environmental problems" (Guerin et al. 208). In my study I may chose another variable such as soil pollution, depending on the variation found in deforestation among regions within Germany. Because of the soil pollution found particularly in former East Germany, this variable might be a better measure of a concrete problem that shapes environmental consciousness. The variable I choose will need to be one that was well know and important to people in Germany in 1995.

Other than the independent variables used in Guerin et al.'s study, I am interested in what effect one more variable would have. Participants were asked a question on the Eurobarometer about the size of locality in which they live (Reif Var 362). I imagine that those living in more urban areas might have better access to recycling, whereas those in more rural areas would have more difficulty participating in the behavior. This variable could help explain variation that remains after other factors are considered. I am curious as to why the Guerin et al. study did not include it.

The data I will be using was requested by the European Commission. This wave of the standard Eurobarometer, 43.1, was conducted between May 19 and June 26, 1995. Fifteen European countries were sampled. I will focus on Germany; 1,032 interviews were conducted in East Germany and 1,058 in West Germany (Reif Sample Specifications). A question was asked of each participant as to which state and sub-region of Germany he or she lived (Reif Var 363, 364). With this information, I will be able to look at the influence of the East/West distinction,

as well as each state and sub-region, on each participant's recycling behavior. I may need to use outside data for some of the region-level variables, such as determining concrete environmental problems, since the Eurobarometer survey is comprised of individual level data.

I am currently taking Inst 381 and will hopefully learn the methods I will need to accomplish the quantitative portion of my thesis. Throughout the class I will at least complete the individual level analysis, if not also the regional level research. In the class I will learn the techniques necessary to replicate Guerin et al.'s model.

I will need to look into scholarship already completed on the topic to better contextualize my thesis. I am interested in recycling behavior and environmental movements in East Germany while it was under communist rule. Since the data was collected only five years after Germany's reunification, previous conceptions of environmentalism and recycling will be of great importance. I will also need more information on concrete environmental problems in Germany at the time the data was taken, 1995. To follow Guerin et al.'s study, I will need to find one problem that seems the most important for Germany at that time; deforestation may be the best answer, but other possibilities should be explored first.

I found a study that cited Guerin et al.'s research; Korfiatis et al published it in 2004. Although I have not yet had a chance to read it, it claims to delve into recycling behavior "in transition" for five countries, focusing on central and eastern European countries after the fall of communism (Korfiatis 1). Other such studies will be useful in understanding why there might be a difference between West and East Germany in my research. I have also noticed that a considerable number of articles cite Guerin et al.'s article on Recycling Behavior. By examining the scholarship of those who have already built upon Guerin et al.'s findings, I can make a larger impact to scholarship on the topic. In general, these points of interest as well as a thorough

literature review should prepare me for properly contextualizing my quantitative analysis. They will provide a basis for the “story” that I write to connect my theory to the data I obtain.

In my thesis I hope to show how Guerin et al.’s study can be applied to a single country. To do so, Germany’s unique history and situation in 1995 must be taken into account. The results will show ways in which Germany is a microcosm of Europe in its past division and process of reunification. The differences in recycling behavior among different regions observed should be in some ways transferrable to the entire continent. Understanding the differences present in 1995 is a step towards understanding the current state of recycling in Europe today.

## Bibliography

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