Prepared for the 2019 European Real Estate Society (ERES) Refereed Sessions

January 31, 2019

Dear Professor Dr. Nappi-Choulet and the ERES Scientific Committee,

This is a supplemental note to the 2019 ERES Organizers regarding my submissions: the "church"

and the "cemetery" papers. I uploaded two extended abstracts for your consideration.

I would be grateful for the opportunity to present both of my working papers at the meeting.

These submissions are made by a student who is expected to graduate in a few months. I admit

that our institutional support remains scarce, which worsens the possibility of going to conferences.

This is going to be an international trip paid by the student himself, which remains a serious

financial challenge. Nevertheless, I will use this opportunity to invest in my research and myself

as a candidate. I understand that very few conferences permit one person to present two papers.

However, I believe in collecting quality feedback from experienced scholars like yourself. More, I

believe my topics would be of interest to the European students whom I hope to meet at the event.

In closing, I thank you for reviewing my submissions. I hope to show some results that are geo-

graphically meaningful to the ERES community in July.

Sincerely yours,

Chad

## The Role of Acculturation in Housing Markets: Evidence from the Institutionalization of the Cemetery

We study the relationship between housing markets and cemeteries. The latter has been scantly researched in the literature, perhaps due to: our collective avoidance of the thought of death itself, as explained by Ariès (1974); or limited availability of data. Recently, Canofari, Marinni, and Scaramozzino (2017) investigate the price of cemetery plots across the U.S., showing there is much heterogeneity in prices and locations of graveyards. The limitation of this and other empirical studies is their inability to identify individual burial sites by names, ownership types, and their characteristics. This motivates us to obtain more detailed information on cemeteries in the U.S. Our objective is to analyze the relationship between housing markets and these culturally significant landmarks scattered across the country.

To extend this line of research, we construct a national database of individual burial sites. This includes abandoned cemeteries, private (i.e., family) plots, religious burial grounds, and municipal graveyards. In addition, our catalog of cemeteries includes burial sites owned by the government, such as the Arlington National Cemetery. This will help us map both the public and private burial sites across the U.S. Our study is timely because there have been recent government reports and media coverage exposing limited burial grounds on military properties (Phillips and Winter, 2018; The U.S. General Accountability Office (GAO), 2011; 1997). This forces cemetery managers to either expand the acreage of burial grounds or set higher qualifications to be buried in regional and national cemeteries. Furthermore, a growing share of older generations in our civilian population means their burial needs will amplify as spaces in cemeteries become scarcer.

## Part I: Cemeteries - Where Are They?

Armed with this data set of cemeteries and transaction prices of residential houses both in (sub)urban areas, we introduce our first marginal contribution: Identify and describe the locations of these cemeteries. This knowledge of the distribution of cemetery sites in both urban and rural areas shows how households, ethnic *and* religious organizations, and municipalities allocate limited land

spaces within their neighborhoods to accommodate those who died. Our ability to identify some graveyards reflecting high social capital (e.g., family plots), and low social capital (e.g., formalized, institutionalized cemeteries) show whether we could capture an additional measure of localized social capital in the housing markets through the lens of burial practices.

The first evidence to the reader is that the heterogeneous distribution of burial sites in the U.S. could be meaningful to researchers in finance, economics, and urban planning. This dispersion of graveyards can be used to study the gradient of cultural attachment to the idea of death. Perhaps this may be considered the most sacred form of cultural practice (Puckle, 1926). Instead of abandoning our ancestors, the presence of cemeteries in our neighborhoods signals our respect for them. Furthermore, we believe well-manicured cemeteries may serve as outdoor museums, according to the historical description of ancient cemeteries in the American history (French, 1975). This may help neighboring properties to appreciate their values over time. Based on the knowledge of the beneficial effect of high social capital on labor markets (Topa, 2001) and financial markets (Guiso, Sapienza, and Zingales, 2004), we state the first hypothesis:

 $H_{1A}$ : Different types of cemeteries can influence house prices in their areas.

In addition, we believe the general traits of counties studied in the literature may identify how much land is being reserved for burial grounds (Kumar et al., 2011). Furthermore, we believe that both politics and immigration play a role in local government's decision to create culturally symbolic sites. We believe this is possible because many public housing and public goods facilities are often influenced by local politics, as explained by (Seligman, 2005; Dahl, 1961; Dilger, 1992). This leads us to the following hypothesis:

 $H_{1B}$ : Counties that are politically conservative allocate more lands for burial grounds.

Based on the relationship between cultural attachment and appreciation of death among immigrants (Sloane, 1991), we predict that neighborhoods showing great respect for the dead may value cemetery frontage more than others. Our research attempts to show this capitalization of the "necropolis" effect of residential properties (Arnold, 2006; Solomon, Greenberg, and Pyszczynski, 2011). Therefore, we present the following hypothesis:

 $H_{1C}$ : Counties that have higher immigrant shares allocate more lands for burial grounds.

Part II: Cemeteries are Hazardous to Housing Wealth?

Tse and Love (2000) show that Chinese homebuyers consider cemetery frontage as a dis-

amenity to a property. They fear that proximity to a burial ground may adversely impact the sales

prices of their houses in the future. Following anecdotal evidence and expected signs mentioned in

various regional science studies, there exists a negative relationship between house prices and ceme-

teries. Our research questions this generalization - or de facto stigmatization - by testing whether

this relationship holds true across all cemetery types in the U.S.

Our second marginal contribution is showing heterogeneity in this relationship by narrowing

our unit of analysis from the state level to the neighborhood level where we cluster cemeteries and

houses in different communities. This differs from previous studies in which either one city (Faye and

Channac, 2017) or a handful of neighborhoods (Richards, 1969; Gimmy, 2008) is used to appraise

the cemetery as a property type. The richness of our cemetery data permits us the luxury of creating

various subsamples of neighborhoods with and without cemeteries. If the existing prediction in the

literature were true, then we would observe a consistent negative effect of cemetery proximity on

house prices. However, we ask whether properties near historically preserved and designated sites

could be benefited by the presence of well-manicured cemeteries. These arguments lead us to the

following hypotheses:

 $H_{2A}$ : Proximity to a cemetery has an adverse effect on house prices.

 $H_{2B}$ : Abutting a cemetery has an adverse effect on house prices.

Part III: Acculturation of Communities: Evidence from the Commercialization of the

Cemetery

The third part of this essay examines the cross-sectional variations in cemeteries on house

prices across the U.S. Our interest lies in establishing the link between cultural effects and housing

prices, as more studies are giving momentum in this strand of the literature (Fortin, Hill, and

Huang, 2014; Humphreys, Nowak, and Zhou, 2016).

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We are inspired by the survey-based study by Frederking (2002). She interviewed Indian business owners in the suburbs of London to study how their cultural attitudes influence their relationship with others within the community. Furthermore, she used her questionnaires to examine whether cultural attachments influence their business decisions.

Her results show communities that tolerate other cultures, interact with foreigners, and embrace the hosting country's businesses are more like to become resilient. Their commercial and cultural roots become strengthened by separating cultural practices from commercial practices. Thus, less conservative Indian communities can deliver a variety of products to consumers both in their ethnic enclaves and other regions across the U.K. by catering themselves to the demands of both ethnic and foreign customers. Otherwise, communities will become tangled with cultural norms and expectations that the rules of law and urban vibrancy may deteriorate over time. In other words, that community will suffer from social pathology (Petersen, 1978).

Based on this study, we argue that in communities that cling to traditional, religious burial practices may have weaker housing markets than in other communities where cemeteries have become standardized. By formalizing and institutionalizing the culture of death, these communities have embraced a more practical method of honoring their ancestors. We acknowledge that commercialization may bring unforeseen perversion to burial practices and rituals that could offend certain cultures (Cowen, 1998). Nonetheless, the fact that some communities have embraced the institutionalization of the cemetery opens the door for small-scale family plots and religious sites to become more financially sustainable, ecologically responsible, and culturally sensitive (Sloane, 2018).

We first acknowledge that culture and tradition change over time, as described by Shils (1981). This shifting tradition will influence our perception of death and help the descendants to embrace practicality as a way of living in America. In other words, communities may face acculturation of burial practices that are more practical and convenient than the traditional way of remembering ancestors by practicing expensive rituals for the dead. This means institutionalized cemeteries and burial services help grieving families alleviate both emotional and financial costs. We expect that standardized burial practices could propel a neighborhood to modernize its tradition of honoring the dead by embracing practicality in the American culture. Based on this idea, we introduce the following hypotheses:

 $H_{3A}$ : Areas where burial practices are more institutionalized have stronger housing markets with faster turnovers. In other words, acculturation improves housing market efficiency.

 $H_{3B}$ : Areas where burial practices are less institutionalized (i.e., more family plots exist) have weaker housing markets with slower turnovers. In other words, limited acculturation weakens housing market efficiency.

## The Current Status of our Data:

As of this writing, we are in the process of cleaning the files for individual burial sites. Our data comes from four million raw websites harvested from the Internet over the past three years. We rely on the directory of graveyard pages on <a href="FindaGrave.com">FindaGrave.com</a>, a subsidiary of <a href="Ancestry.com">Ancestry.com</a>. The latter is a popular website known for its comprehensive genealogy records of American families and their ancestors, who migrated from the Western European countries. We collect and catalog observations by scraping information on cemeteries and memorial parks.

We expect to obtain some preliminary results by the time the ERES Conference is held in early July, 2019. We hope to present interesting results to our European students and seasoned scholars attending the meeting in Cergy, France. On behalf of my dissertation advisors, I am grateful to the Organizers of the 2019 ERES meeting for their patience and attention.

- THE END -

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