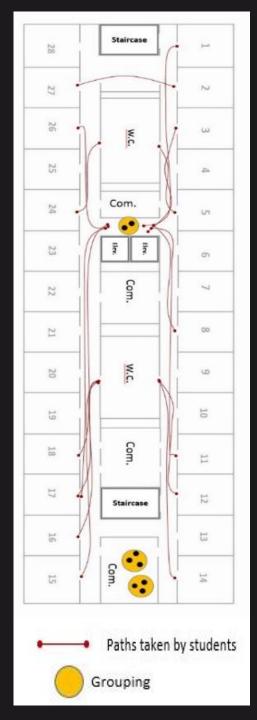
An investigation of spatial factors pertaining to maintenance and formation of romantic relationships : The case of College Towns Sohrab Rahimi, PhD of Architecture Candidate, MGIS Candidate Adviser: Clio Andris, Ph.D. Friendly Cities Lab Fall 2015

Theoretical Background:

- "By giving shape and form to our material world, architecture structures the system of space in which we live and move. In that it does so, it has a direct relation to social life, since it provides *the material preconditions for the patterns of movement, encounter and avoidance* which are the material realization - as well as sometimes the generator – of social relations."(Hillier and Hanson, 1984, p ix)
- Social interaction, if frequent, can build the foundations for romantic relationships .
- **Proximity**, as a result of proper spatial configuration, is a key factor influencing social interaction (McPherson et al., 2001; Williams, 2005; Marmaros & Sacerdone, 2006; Tsai, 2006; Wineman et al., 2009; Sailer & McCulloh, 2012; Preciado et al., 2012).
- **Common spaces**, if designed properly, attract people and increase social interaction (Abu-Ghazzeh, 1999).



Contextual background : The benefits of romantic relationships on campus

- Emotional variables highly influence the capability of first and second year students at college to adjust to their new lives (DuBois, 1995).
- It also affects their academic success (Van Heyningen, 1997).
- Given that most faculty and alumni are likely to be married or in a romantic relationship due to their age group characteristics, having spaces suitable for couples in general would help integrating them into the social fabric of the campus.
- Places chosen by couples for rendezvous are also congenial to other individuals (Whyte, 2012).
- Designing sociable spaces on campus has gained momentum since the formation of "the American College & University Presidents' climate Commitment (ACUPCC)" in 2007.
- The number of post-secondary students have increased from roughly 16 million in 2001 to roughly 21 million in 2011. It is important to design the new campuses properly to address the social needs of different groups on campus.

Objectives:

There are three major objectives to this research:

1- Investigating the correlation between relationship status and residential preferences.

2- Analyzing points of interest: location, semiotics, and function.

3- Macro-scale and micro-scale analysis of the lively streets.

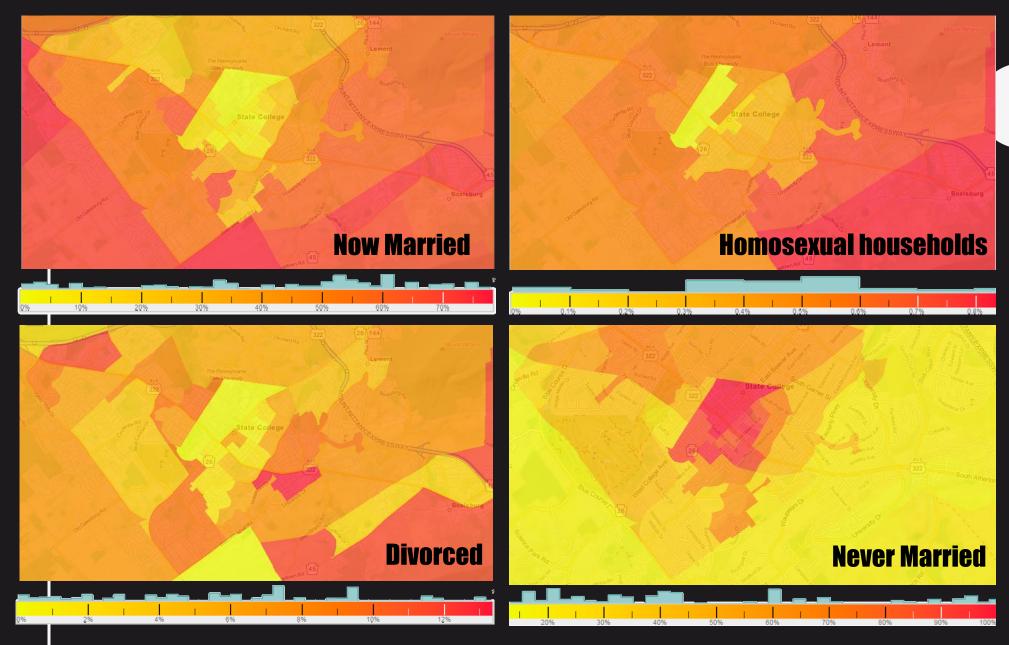


Neighborhood

Points of interest

Streets

The neighborhoods: relationship status and residential preferences.

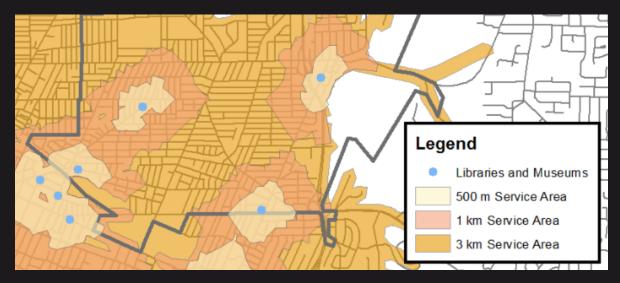


The neighborhoods: relationship status and residential preferences.

• Housing conditions: Housing conditions in a neighborhood can be considered as a valid index for social, political and economic conditions because they directly reflect the preferences of the residents (Form, 1954; Buttimer, 1972; Fried, 1982)

Variables: Housing ownership rates, density, rental prices, sold prices. **Data sources:** Zillow.com, interfaceexpress.com, city-data.com

• Land use: Land use defines the function of the neighborhood and they highly affect the life styles of the residents because they are reflective of their needs. Variables: Parks, Grocery stores, schools, super markets, libraries, museums, and churches. Data sources: National Atlas of the United States, Borough of State College Government



Points of interest: analyzing the location, semiotics and functions of attractive places

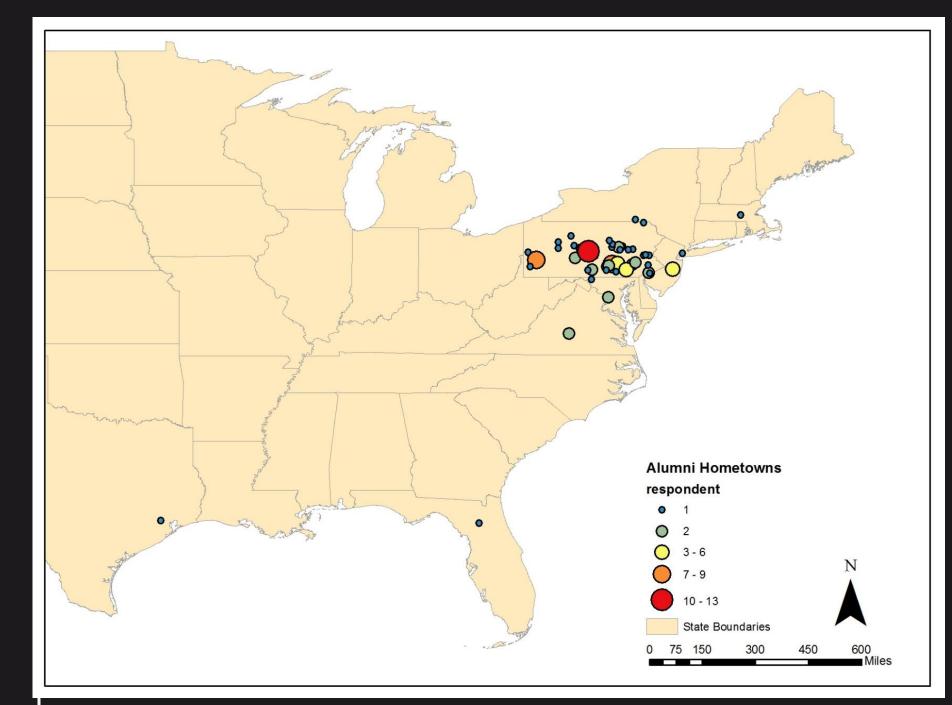
• Identifying attraction points: third places where couples like to spend time together.

Data source: interviewing couples of different groups on campus (Alumni, Undergraduates, graduates, and faculty):

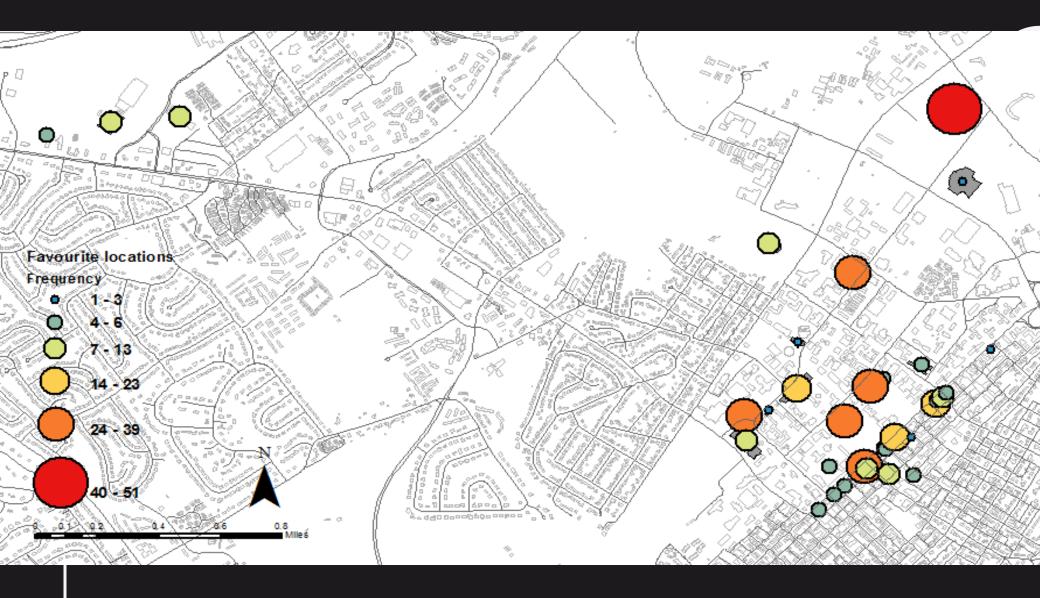
Questions from Alumni: Relationship Duration, Return Frequency, Graduation year, Place of Residence, Where do you stay, First met place, Favorite places on campus, Favorite places in town, What they like about SC in general.

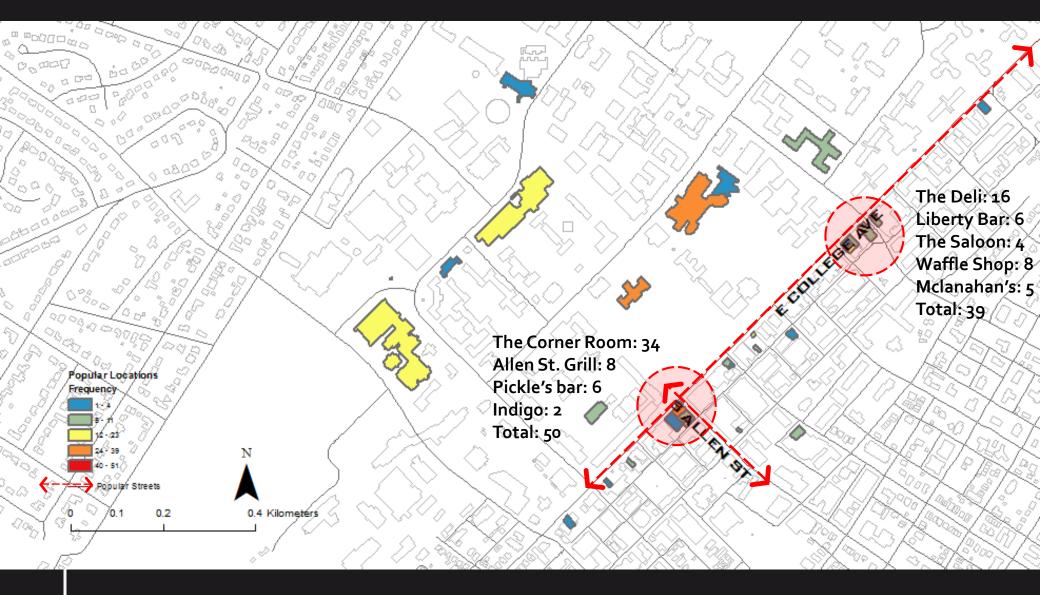
Methods:

1- Viewshed analysis: analysis of the visibility to and from points of interest
2-Qualitative analysis of semiotics (architectural qualities)
3-Qualitative analysis of the role of institution and types of activities



Points of interest: analyzing the location, semiotics and functions of attractive places





The lively streets: studying the popular streets identified by couples

 Dividing up the College avenue into multiple segments to study the micro-scale spatial factors influencing the attractiveness of each segment.

Data source :

1- respondents comments about the College Ave.

2- Infield observation which includes manually coding the types of activities, the existence of groups, as well as their gender.

Analysis Methods:

1- Using the Urban Network Analysis (UNA) to measure the Betweenness, Gravity, Closeness and Straightness of different streets.

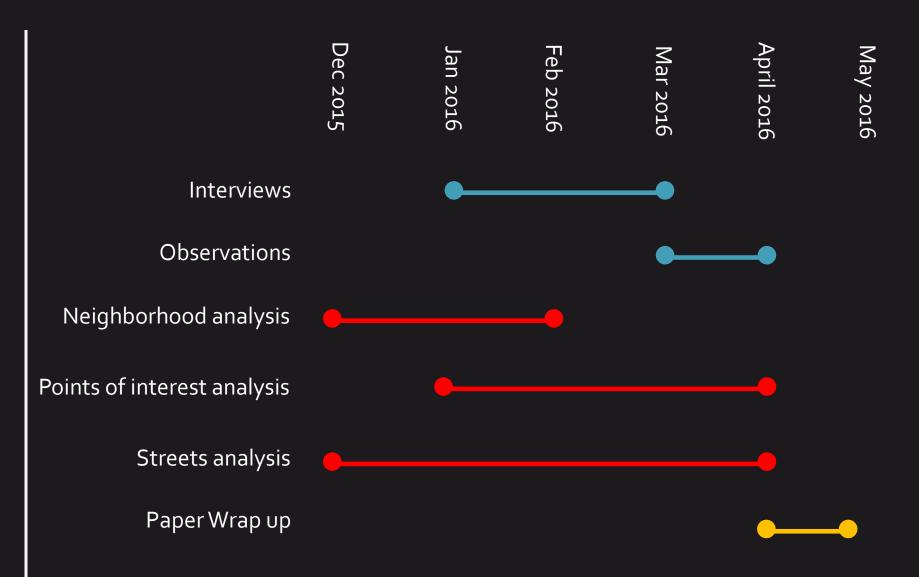
2- qualitative analysis of each segment





- Variety of businesses
- Permeability at the street front
- Articulation of the buildings' façade
- Public/private seating
- Green spaces

Project schedule:



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Thank you! Questions?