To draw conclusions from the analysis, the results of each category will be explained to identify similarities or differences of findings for each place in the town center. The results of the data analysis of the three methods will be discussed based on the research questions. Section one explains the results of data in relation to culture, and the temporal and spatial use of the town center. Section two explains the results of data in relation the symbolic association the residents attach to the town center. The last section will discuss the recommendation for the town center of Binan.

Section 1: How are cultural/social values related to the spatial and temporal use of the town center?

Table 12 is a matrix showing the summary of results for each category in relation to each place in the town center. The findings of this study indicate that the most significant functions of places that are derived from the primary activity and the places valued by the participants revolves around the ritual use of the following places:

- the parish church where religious practices are conducted;
- the public market/retail shops where the provision of everyday necessities are furnished; and
- the municipal hall where the seat of government and its related services are rendered.

<table>
<thead>
<tr>
<th>Table 12. Matrix of Categories</th>
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<tbody>
<tr>
<td>Categories</td>
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<tr>
<td>-------------</td>
</tr>
<tr>
<td>Location</td>
</tr>
<tr>
<td>Town Center</td>
</tr>
<tr>
<td>Parish Church</td>
</tr>
<tr>
<td>Municipal Hall</td>
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<tr>
<td>Public Market</td>
</tr>
<tr>
<td>Retail shops</td>
</tr>
<tr>
<td>Street vendors</td>
</tr>
<tr>
<td>Basketball court</td>
</tr>
<tr>
<td>Rizal Monument</td>
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</table>

- Positive association
- Negative association
- 1st highest preference
- 2nd highest preference
- 3rd highest preference
**Hierarchy of Values.** These results indicate a hierarchy of value in the following order: religion, economics, and politics. Religious value is on top of the hierarchy due to strong affiliation to their behavior in everyday life. Even the most desired “religious related events” that are held in the town center likewise reflect how religion was assimilated in their social lives. Thus, religion may be viewed as the center of norms to guide daily decisions and a way to conduct other aspects of their personal lives (Bonkovsky 1986).

Economic value comes next because it provides for the individual and collective needs of the community. Individual needs are addressed by providing for the daily domestic necessities of each household. Furthermore, it becomes a potential source of income for individual entrepreneurs. The collective need of the community is addressed by the economic benefits earned by the municipality of Biñan from the public market (Lesser 1964; Brovonsky 1986).

Political or institutional value comes last in the ladder because of the acknowledgement and submission to authority that would implement law, order, and structure to the society. In a more subtle sense, this submission can be a reminder of the colonization of the Filipino culture.

**Occurrence of Associated Activities** The occurrence of associated activities which are spins off from the primary activities show that only the parish church and public market are the only places that instigate social activities. This may reflect impressions of a lack of restrictions for different user groups to mix around and experience the place. This notion may explain how these places provides the ‘Filipino space’ where there is a constant interaction with social groups in the working environment (Fajardo 1996; De Leon 1995).

**Concentration of Temporal and Spatial Use of the Town Center.** These functions and values reveal that their relationship to the temporal and spatial use of the town center are concentrated in the parish church, public market, and municipal hall. For example, religious habits and practices were done first in the morning before engaging into the everyday ritual of buying food in the public market. Likewise, most government obligations were done in the morning because of the perception that the patterns of government employees are only present during this time of day.
Even though the survey results show the parish church to be the most visited place, results from the observations show that a larger concentration of users in the morning and afternoon are moving towards the area of public market. Observations also show the other activities and spatial use of the town center at different times of the day. The general users of the town center in the morning are primarily adults and mostly women with ages ranging from mid-twenties to late fifties. The variety products sold in the public market and street vendors and the type of activities during this time directly supports the needs of these users. The next layer of activities are manifested in the different types of products sold by the street vendors in the afternoons, which are for children, students, office workers, and other adults. Marketing at the public market is not as intensified during this time. For both these periods, street vendors crowd the frontage of most buildings at the town center. From the late hours of the evening until the following early morning hours, the products and activities are taken over by traders and wholesalers who supply goods that sustain the cycle of activities for the following day.

The pattern of use and diversity of activity generated by the different functions of the parish church, public market, and the municipal hall helped anchor, shape, and define the town center of Biñan. In this sense, the town center’s open space is the multi functional space that provided for a variety of street vending. This demonstrates how Filipinos use the main space as a multi functional area that opens the engagement of social interaction (Fajardo 1996; De leon 1995; Encarnacion -Tan 1993).

Street Vending. Another factor that affects the spatial and temporal use of the town center is street vending activity. Street vending operation in the town center is allowed by the local government through the issuance of a mayor’s permit, but there is no official documentation of their exact numbers. The intensive use of space and the layered activity of the ambulant street vendors at different times of the day shows the relationship of the town plaza’s open space land use to the informal economy brought by the street vendors. The variety of goods and products at different times of the day contributes to the 24-hour vitality and image of the town center. However, the overuse of the infrastructure and overload of activities prominently
shown in the number of vendors and 24-hour activities could be the cause of the perception of deterioration of the town center.

Although one of the problems and negative associations of the town center that was stated in the interviews is “crowding” due to the excessive number of street vendors, a large number of residents were observed to patronize these vendors. This shows that this informal economy benefits the residents but may pose as a conflict with the formal economy of the town center such as the public market stall owners and other business entrepreneurs within the town center. Informal economy is a process of income which is ‘unregulated by the institutions of society, in a legal and social environment in which similar activities are regulated’ (Timothy & Wall 1997, 322). Due to their large numbers, these vendors have hampered the pedestrian circulation causing irritation to the users. However, the landscape of these ambulant street vendors creates an atmosphere of charm, variety, and color to the town center’s open space.

Further studies can be made on the license application of street vendors in order to document their actual numbers and activities. This could assist in the evaluation of the type of activities, spatial structuring, and policy implications of these informal entrepreneurs who may be one of fundamental components of the economy of the town center because it can provide large employment opportunities (Timothy and Wall 1997).

All of this information on the functions of the place in relation to the specific time spent in the space, and the type of activities within these spaces, could be useful to designers. The determination of space allocation for entrepreneurs and resident’s ritual usage as well as the temporal programming of the layers of activities within the day, organizes space and efficiently maximizes users’ social time for certain activities.

Designers can learn about the place values of the users because it informs them of its importance in relation to its function and meaning. For instance, the parish church, public market/retail shops and municipal building are valued because of their function, while the Rizal monument is valued due to its associational meaning. These places reflect different foci in the user’s everyday life because they represent goods and services, art and religion and economic
value as well. They also consolidate the social and personal life through ritual usage that is related to religious practices (Lesser 1964; Bonkovsky 1986).

**Relationship of Values and Land Use.** The morphological analysis suggests that the religious, economic and political values are upheld over a period of time due to the evidence of the three physical elements that have been retained on the same location over time: the parish church, the public market, and the municipal hall. There were no sudden or unexpected changes in the built form of the town center which may be explained by most lot ownership “not changing hands.” The progressive expansion of the public market suggests that there is a continuous trading and commercial activity in the town center that could have resulted in the 24-hour activity to this day. The expansion of the coarser grain of commercial structures in the urban fabric of A. Bonifacio Street in turn supports the progressive sprouting of residential houses in the northeast and southwest quadrant of the urban fabric of the town center. This is evidence to an incremental change and increasing economic value of the town center.

The remarkable preservation of the residential land use pattern in 1948, 1967, 1979 1985, and 1997 in the town center of Biñan, is in contrast with the land use pattern of city centers in North America such as the transformation of residential areas within the city centers into commercial, retail, and public administration services (Ratcliff 1949; Mather 1986). The land use policies that were formulated in the past show a less stringent control practiced by the local government, which in some ways preserved the residential land use pattern of private lots around the town center. In spite of the strong rising economic forces, residential property owners retained ownership that may have controlled the land use pattern within the town center. This manifestation of a high ‘value’ towards traditional land use and ownership may have influenced the reluctance of the local government to implement changes on land use and zoning policies affecting privately owned lots. In addition, this also prevented the local government to respond to the changing market conditions. In some ways, this system allowed the incremental change and preservation of “value” to land use and private land ownership as part of the family heritage and perhaps social status. Since there is a high regard for strong family ties, perhaps lot owners value this ownership for the provision of future financial security to the next of kin. As Hunt et al
(1998) explains, two of the Filipino values is strong family ties and an emphasis on status rather than function.

Furthermore, despite the residential land use of the lots in the periphery of the town center (see the 1999 observed land use map) change of the ground level residences to commercial uses shows the practice of reactive-spot zoning by the local government. As a result, the absence of a well-defined land use and zoning framework did not entice speculative commercial developers who would normally acquire and consolidate properties in the town center.

Mather (1986) explains that if the urban pattern is a reflection of land ownership during the time of its growth, separate decisions on land use and development is reflective of these urban patterns. However, in this case, the urban land-use pattern of Biñan town center shows how lot ownership “not changing hands” influences land use patterns even though there are extraneous market forces involved.

Section 2: What is the symbolic meaning of the town center?

In this study, the associations of images are based on human experiences and memories, which are concretized through their choices and desires (Rapoport 1977; Lynch 1960; Rokeach 1979). Understanding symbolic meaning is valuable to designers and urban planners because this abstract link communicates what the user needs in the built environment. Without symbolic meaning, user cannot anchor and connect themselves in settings that are part of their everyday lives.

The results in this section show that there is a thin line between meaning and values that people attach and assign to the town center. While the results of values show that religion is on top of the hierarchy, the results of symbolic associations reveal that the town center is synonymous to the public market, hence, placing economic activity on top of the hierarchy.
Therefore, when symbolic associations of the town center are expressed and articulated, economics takes over the top of the hierarchy.

**Symbolic Meaning of the Town Center and Public Market.** In this sense, there is a significant dichotomy between the negative and positive symbolic associations that the residents attach to the town center through the image of the public market. On one hand, the public market, which is the source and cause of the declining environmental quality, supports the negative associations of the town center. The lowest negative adjective ranking of “dirty” for the town center suggests this negative association with the public market.

On the other hand, a sense of pride and the economic necessity of the public market generated positive associations because of the goods and services that it provides the municipality and residents as well (Lesser 1964; Bonkovsky 1986). This contradiction in symbolic associations strongly reveals that meanings, whether negative or positive, have been acquired over time due to the constant use of the town center, and therefore indicate an attachment and a sense of place (Steele 1981).

**Symbolic Meaning of the Parish Church.** Since all of the words associated are positive descriptions of religious practices, this is indicative of how the respondents use the symbol of the parish church as their guiding principle in their daily lives. Moreover, they go there frequently before engaging into their daily rituals. Assimilation of Spanish influence can be seen in the retention of religion as on top of hierarchy and this can also be observed by the fact that there was no mention of relocating the religious structure.

**Symbolic Meaning of Rizal Monument.** The Rizal monument garnered positive symbolic associations even though no daily activities were conducted and the static use of the place is limited only to national and official celebrations. This may be explained by the notion that the residents take national pride in the monument. Its dynamic function reminds them that the national hero, Jose Rizal, is strongly affiliated with the sub-region. Since the statue of the natural hero can be seen in many town centers, this cultural structure becomes a specific connection between the town center and the rest of the Philippine culture (Hart 1955).
The steel fence and closure of the Rizal Monument to public use ensured the cleanliness and maintenance of the good condition of its elements. This is indicative of how the local government highly values the preservation of the monument because it serves as a strong affiliation with the national hero’s historical background.

**Symbolic Meaning of the Municipal Hall.** The amenable relocation of the municipal building by the key informants can be seen as an implicit prioritization of economic and religious value rather than to institutional values. With the retention of the parish church and public market as the only two anchoring physical elements in the town center, it can be inferred that these two public structures will link and afford behavior settings related only to religious and economic activities. The elimination of the institutional symbol that had been traditionally part of the Biñaneses culture and identity that enriches the town center’s built environment, would be in the dilemma of losing the symbolism, identity, and being overwhelmed by a homogeneous commercial environment as seen in other western city centers. Furthermore, the strong link to places of public indoor spaces, such as the municipal building to the public realm of the outdoor spaces in the town center, would decrease. The priorities set on economic activities will result in the production of quasi-public spaces especially those that are under private control. Therefore, the type of values, symbolism, attachment, and identity nurtured by this type of built environment for future users of the town center would change because of the experiences and memories afforded by the changes in the built form.

This research suggests that different cultures may have different hierarchy of needs, values and symbolic meaning. Maslow’s hierarchy of needs like survival, safety and security, belonging, esteem, and self actualization are used and adapted by western city planners and architects for defining their functional designs (Lang 1994). However, this model becomes non-sequitor because in this particular study, the town center of Biñan, Laguna, demonstrates that spiritual or religious needs are positioned on top of the hierarchy followed by economic needs and lastly, institutional needs.

1 Biñaneses—long time local residents of Biñan
Section 3: Recommendations

This study could benefit urban designers and landscape architects who are involved in the creation, manipulation, and mitigation of the physical environment because cultural values and symbolic meaning are abstract linkages that are given shape in the built form through the structuring of the physical elements and open spaces. It also clarifies the similarities and differences of perception between residents, local officials, and prime movers regarding the town center. Findings from this study do not discount the role of the town center in the everyday life of the community because it is the focal point that provides for the daily individual and social activities thus anchoring the values that give meaning to their everyday lives.

The three physical elements anchoring the town center, the parish church, the public market, and the municipal hall, clearly indicate the residents’ desire for the structures to be retained and maintained.

The Public Market. The public market in particular, needs to be improved in terms of infrastructure, sanitation, environmental quality and aesthetic quality. The negative characteristic of “dirty” for the town center reveals an association with the poor environmental quality caused by the activities related to the public market and perhaps the street vendors as well. In addition to this, children were seldom brought to the town center due to the unhealthy, unfavorable environmental quality, and lack of places of interest and social spaces for children.

Proper sewer, storm drainage, and water supply provisions that are environmentally safe are necessary to eliminate muddy conditions, fowl smell, and unsanitary conditions of the public market. A more vigilant rubbish collection and disposal system at different times of the day is essential to maintain the perception of the environmental quality of the town center. All the mentioned improvements of the public market will enhance and improve the image of the Biñan town center as a 24-hour market and as a vital center to the town.
**Basketball Court.** Desires by residents and key informants to convert the basketball court to an open plaza again show the value of a barrier free open space. The existing covered structure has created an exclusionary environment for certain user groups and limited the function of the space to only recreational and cultural activities. Unlike the previous open plaza, the place had been the only space to freely socialize with different user groups, and conduct cultural and recreational activities. The decision to cover the plaza resulted in the demise of the public life in the plaza and a static use that defeated the initial plan to make the use flexible in any weather condition.

I recommend that the local government rethink how to recapture the public life that was lost in the only open space at the town center that was the plaza. The fence around the basketball court could be demolished to make the space look welcoming and encourage social uses. Without public space to conduct social activities, residents will use other places, and the town center will lose its cultural value and meaning to the residents.

The greening of the plaza as a project by the Los Maduros Club shows efforts by this civic organization to improve the aesthetic quality of the town center and improve the hot environmental condition at certain times of the day. However, civic projects such as this should be coordinated with the future master plan of the town center to prevent the uncoordinated piece-meal method of refurbishment.

In terms of methodology, the open-ended questions of the survey enabled this study to probe deeper and articulate values and meaning of the town center to the residents. A better set of questions that are specifically appropriate in the Philippine context should be used to further articulate the respondents’ cultural values and meanings.

The closed-ended questions such as the adjective list and Likert Scale for preference were well received, proving that these types of questions are easier for respondents. However, a more careful adjective list in Tagalog must be devised instead of using adjective list extracted from other western studies. Because of the differences in cultural background, this ensures that proper words are selected in the same context as the use of the language and intent of the study.
The supplemental site observation and behavioral mapping are useful tools to observe the behavior and actual use of the place. Due to the size of the site, more time could be spent on the actual observations so that more information on observations and behavior mapping can be gathered.

A supplemental study of the typology of buildings over time is recommended to understand the generation and evolutionary process of buildings to its relationship to the morphology of the town center. The inclusion of other relevant time periods may have affected the pattern of the urban fabric of the town center. These could include the postwar rebuilding in the late 1940s to the 1950s, the economic recovery in the 1960s and the spot-zoning approach to land use/zoning in the 1970s and 1980s. Additional information from the regional office of the province regarding lot subdivisions may reveal more data on the evolution of lot subdivisions, ownership and land use.

A morphological study is useful for designers because this method provides evidence to infer the values that are manifested in the physical structures of the built form over time. In addition, it can guide decisions for change or continuum to future urban patterns based on the peeled layers of the urban fabric. Because of the limited time spent on this research only morphological data were gathered.

The methods used in this research create the possibility of establishing a general framework for future design and planning initiatives that focus on the social morphology of other colonial town centers in the region that are based on the residents’ values and symbolic meaning. This research strongly suggests the combined use of questionnaire survey, site observations, and morphological studies in order to bridge the gap between users and the built environment so that we can understand the correlation of desires and preferences, human behavior, and values revealed in patterns of the urban fabric.

Change in the near future is inevitable due to the market forces that may affect the values and associational meanings of the town center. For example, the local government’s interest in relocating the municipal building to give way to the expansion of the public market and other
economic activities would only address the economic and spiritual needs. Thus, the social morphology of the town center may be predicated by diversity of economic and religious activities.

Furthermore, the CALA development and land use framework plan which focuses on the economic, social, environmental, infrastructure, and institutional strategies would greatly affect the town center’s public open space and its social structure when it becomes an ordinance. By transforming Biñan into one of the urban centers in the Cavite and Laguna provinces, manufacturing industries, additional housing, health facilities, improvement in transportation and communication, and changes in development policies may result in the establishment of other minor commercial centers in the municipality. This in turn, will reshape the use of the public space and the social morphology of the town center in Binan.

It is hoped that the research method in this study can be used as a model for future research on other colonial town centers or plazas undergoing urban development. The urban environment is comprised of a variety of people with different desires, behaviors, and needs, therefore reflecting different ways of utilizing public spaces in the urban environment. In order to determine desires, behaviors, and needs, it is important to undergo a selection of each sector that would represent the community.

Because this study was intended to investigate function, values and symbolic meaning, this study should be considered a pilot study that sets a precedent for further investigation of function, and the malleable nature of values and symbolic meaning as an integrated entity. I recommend that the local government and private sectors cooperate and work closely in the formulation of a more comprehensive urban design guidelines for the town center, since urban development will affect a majority of the properties that are privately owned. Even though the local officials and the prime movers from the private sector share the same values and sense of pride for the town center, the absence of urban design guidelines creates a gap between the urban development concerns of the private and public sectors.
These guidelines should be reflective of not only the function but also the values and meaning the residents attach to the town center. Furthermore, the integration of community participation is essential in the decision-making process regarding the built environment in which they use. This participation could potentially nurture and foster the community’s stewardship, attachment, and rootedness to the town center of Biñan.

I recommend that the urban design guidelines address issues that are relevant to the Philippine context and Filipino lifestyle. There should be an appropriate level of interventions with regard to:

- designing and defining the public realm,
- specifying or restricting the temporal use of open space by the ambulant street vendors,
- specifying and regulating building forms
- specifying and regulating preservation of historical structures

A careful study and evaluation of the urban design guidelines for the town center of Binan will ensure the preservation of its charm and tradition. Over-regulation evident in the homogeneous built environment typically seen in western and other Asian cities that have undergone development has easily eradicated the nostalgic ‘charm and atmosphere’ attached to these city centers.

On an ending note, the future of Biñan town center not only depends on the isolated efforts by the local government, but also upon the recognition of what the town residents’ value. A collective effort and involvement in urban development by the community could provide a better environment and quality of life.