3 Hunter Motivations and Identity Construction

3.1. Introduction

Each culture exists in its own social and economic reality even as globalization appears to break down the borders that exist between societies. Factors such as availability and distribution of resources (often the *unequal* distribution), type of government, and historical events construct this reality, create tension, and exert pressure on society. Often, unequal pressures within a society tend to marginalize some sections, creating additional tensions. Hunting is one of many means for men and women to cope with the marginalization realized in their socio-economic reality. Specifically, Magalhães Corrêa (1936) provided a detailed profile of the poor and politically abandoned residents that lived in this rustic, isolated wilderness region on the periphery of the then-Brazilian capital, far removed from the cultural and social norms of the "urbanites" (Franco & Drummond, 2005). A thorough analysis of the place where these citizens call home and the space in which they operate will reveal the intricate relationships that helped construct an identity able to combat the pressures, tensions and conflicts these citizens faced in their daily lives.

3.2. The Pedra Branca Massif: A "place" to identify with

All history at whatever scale, takes place and every such place must be seen in its own qualities. -D.W. Meinig

The Pedra Branca Massif in the western zone of the municipality of Rio de Janeiro in the state of Rio de Janeiro, Brazil is the focus area for this research and is such a place, described by Meinig (1989), to be seen for its unique qualities and studied. Yet, it has been stated that globalization will bring the end of place as the world becomes more homogenous (Castells, 1996). For example, Li and Reuveny

(2003, p.29) state, "Most scholars agree that, at the minimum, globalization implies that countries are becoming more integrated into the world economy, with increasing information flows among them. Greater economic integration, in turn, implies more trade and financial openness. Rising information flows imply, arguably, cultural convergence across countries". However, the aim of this chapter is to demonstrate the richness, the uniqueness and also the dynamic between human beings and the Pedra Branca Massif despite globalization. In the following paragraphs, this landform, developed through a combination of natural and anthropogenic processes, will be placed in the roles of center stage, backdrop, and especially actor in the complex, daily interactions between society and nature. This section highlights the importance imparted upon the massif and following sections will demonstrate the unique identities constructed through a sense of place.

In the age of globalization, there is increasingly greater interdependence between economies, politics and even geographies especially as the speed of information increases. As Klaus Müller (2003) states,

Globalization is a single word with a hundred different meanings. Journalist Thomas Friedman, author of *The Lexus and the Olive Tree*, believes that "globalization has replaced the Cold War as the defining international system." He sees a dramatically changing world, driven by a borderless free-market capitalism and new communication technologies. As described by Friedman, "globalization is the inexorable integration of markets, nation-states and technologies to a degree never witnessed before—in a way that is enabling individuals, corporations and nation-states to reach around the world farther, faster, deeper and cheaper than ever before."

But while some praise the liberating effects of free trade and greater global communication, claiming that marginalized groups are empowered as a result, others fear standardization and forced assimilation into a Western-dominated world. Globalization is, ironically, a polarizing term. Whether people focus on the economic, political, cultural, or ecological consequences of globalization, they see either disaster or potential, neo-colonialism or free trade, empowerment or despair. (Müller, 2003, online).

Consequences discussed by Müller (2003) can range from local to global. For example, localized deforestation arguably contributes to melting of polar ice-caps. Yet, global systems affect local populations equally severe. For example, global expansion (imperialism) of the Portuguese in the 1500s resulted in a significant reduction in aboriginal populations in Southwest Brazil. In addition, this colonial movement resulted in the importation of slaves from Africa and the exportation of raw materials. The exploitation of the land resulted in changes to the landscape, including deforestation, uneven and unplanned urban development, and a migration of populations looking for employment. As this change in the landscape occurred, there were direct consequences for residents of the Pedra Branca Massif. In studying these affects and changes over time in this stretch of Atlantic Coastal Forest, a sense of place is developed providing insight into historical actions by these communities as well as possible landscape trajectories.

Therefore, if the geographer's objective is, as Dickens (2004, p.5) argues, "to analyse the processes shaping and reshaping the global map," then a thorough understanding requires the consideration of how "space, place and time are configured and reconfigured as a result of contemporary changes in technological, economic and political processes" (Faulconbridge & Beaverstock, 2009, p.332). However, in examining this configuration and reconfiguration of globalization, a rearrangement of spatial differences into temporal sequences can, according to Massey (1999, p. 271), have "enormous implications: it implies that places are not genuinely different..., but simply 'behind' or 'advanced' within the same story; their 'difference' consists only of their place in the queue". Indeed, place difference has become more important. First, from an economic standpoint, "uniqueness" is sold as a commodity which can be understood in just a glance at the marketing of wines from different regions or in any tourism magazine. Secondly, and perhaps more importantly to this research, place difference provides individuals with a sense of belonging, a sense of place similar to what is felt when returning to a childhood home or spending a holiday around the table with relatives. Hunting is a territorial activity that requires a specific familiarity with the landscape beyond what an "outsider" is capable of observing.

Through discussions with residents in the neighborhoods of Camorim, Vargem Grande and Campo Grande, it has been discovered that the massif represents a place for leisure, research, agricultural sustenance, a means of reconnecting with cultural heritage in the form of farming and hunting, and simply an escape from the sometimes oppressive heat of summer in its many rivers, waterfalls and natural pools. In terms of "sense of place," the Camorim River Basin, for example, is a small valley located on the southern face of the massif and carries many different, yet significant meanings for different groups of people. Through interviews, this mountain range represents to a few local geographers a recovered forest, full of environmental history hidden among the litter layer. To local farmers who live and work in the PEPB, without electricity and living in homes with bare floors, the massif offers opportunity for subsistence and economic opportunity through sustainable agriculture (utilizing mules instead of fossil fuel sources and selling locally) just as their ancestors had utilized that space.

In discussing the massif with a hunter in his late 30's who migrated from northeastern Brazil to Rio de Janeiro to find work; he related how the massif provided leisure activities, such as hunting, that he was familiar with in his rural childhood home. As a child he hunted with his father and in the PEPB, he was able to recapture his sense of identity through interactions with this place. The link between hunting and culture has also been expressed by Hanazaki et al. (2009, p.2), who state "the persistence of hunting activities in Brazil in spite of the well-known illegality of this practice is closely associated with cultural questions". It is unlikely to be an economic question for the time, energy and money spent in the activity of hunting exceeds the cost of a kilogram of meat in the local market. For example, in May of 2011, one local supermarket (Guanabara) advertised a beef rump roast at \$12.85 per kilogram. Spending one day hunting in the woods instead of working can equate to approximately 80 Brazilian Reals of lost wages for a day laborer and still 19 Brazilian Reals if the worst case is taken dividing one month's minimum salary by 30 days. These figures do not take into account failed hunts or equipment costs. If hunting in the Pedra Branca Massif was not driven by economics, then perhaps seeking control of one's daily life by exerting oneself spatially presents a better way of understanding of the local society. The importance of such an achievement is found in Johnston's (1991, p.139) statement, "we can only account for the changing geography of any area, large or small, if we appreciate the nature of the society there". The motivations behind hunting, captured through interviews, provide further details about the sense of place given to this massif.

Creating balance between technology and culture is another example of how place identity provides value to society. Over the past four decades, the pace of technological advancement increased exponentially, meaning that the world today is very different from the world viewed in 1970. This rapid change can be difficult on any generation, but, as stated by Kong et al. (1996, p.529), "environments are especially important to aging residents, affecting their adaptation to change, the sustenance of their personal identities, and their continued participation in life, particularly given their diminishing physical ability, reduced economic means, and changing surroundings". In addition, the authors go on to say that "geographers can add to understanding of the contribution of geographical setting or milieu to the actions and inactions of the elderly as well as to their sense of identity and satisfactory evaluation of life" (Kong et al., 1996, p.533). Carlos (1996) discusses how a sense of identity can be found in smells, sounds, familiar scenes or simple memories that occurred in a specific place and he describes how place both describes the day-to-day life, yet also reveals conflict in the world to-day by identifying and highlighting differences. As people's sense of place is attacked by globalization, place may become an increasingly volatile source of conflict as Harvey (1990, p.427) states; "The more global interrelations become, the more internationalized our dinner ingredients and our money flows, and the more spatial barriers disintegrate, so more rather than less of the world's population *clings to place* and neighborhood or to nation, region, ethnic grouping, or religious belief as specific marks of *identity*" (emphasis added).

Additionally, Massey (2004, p 16) states, "If places (localities, regions, nations) are necessarily the location of the intersection of disparate trajectories, then they are necessarily places of 'negotiation' in the widest sense of that term". Just as places can be seen as unique, so too are the networks they establish as Solórzano et al. (2004) discuss in regards to the unique geo-ecological reality of exchanges between the Pedra Branca Massif and the city of Rio de Janeiro such as resources in the form of charcoal, lumber or agricultural products. Finally, as Sack (1990, p. 134) highlights, "place and space become indispensable means for understanding our effects and responsibilities because actions travel through space, and place integrates meaning, nature, and social relations". Identifying the importance of place builds a base of knowledge useful for the development of deeper understanding of this massif and its residents.

3.3. The marginalized citizen-hunter and his spatial construct

Hunting in the rural – urban boundaries within Rio de Janeiro was one of many means for men and women to cope with the marginalization realized in their unique socio-economic reality. These residents are not separate from urban society. On the contrary, they are integrated throughout the landscape, although asymmetrically according to Perlman (2011, p. 14). Perlman (ibid) goes on to state that poor residents in Rio de Janeiro "give a lot and receive very little. They are not on the margins of urban life or irrelevant to its functioning, but actively excluded, exploited, and 'marginalized' by a closed social system". Corrêa (1936) also describes how work from the *sertanejos* (wilderness dwellers) supplied the city's needs. Therefore, the PEPB is an ideal location to observe how urbanization affects individuals and how hunting was a means for those individuals to utilize space and exert power over their daily lives.

Hunting offered outlets and opportunities for social interaction among a marginalized minority within the urbanized landscape. Understanding these social relations is an important step in understanding the use of space, a fact confirmed by Gottdiener (1993, p.131) stating that "social relations also are spatial relations; we cannot talk about the one without the other". Gottdiener (1993) agrees with Lefebvre (1991, p.404) who demonstrates, repeatedly, that social relations "have no real existence save in and through space". A thorough analysis of the place where these citizen-hunters call home and the space in which they operated reveals intricate relationships and processes that sustained the activity of hunting and allowed the construction of an identity able to combat the pressures, tensions, and conflicts found in daily life.

The neighborhoods surrounding the PEPB consist of middle and low income families and therefore a mix of formal and informal housing. There are even luxury condominiums complexes interspersed along the border and even inside of the park illustrating the potential exchange value that can be imagined for this land through real estate speculation, especially as some of the venues of the 2016 Olympic games will be located within two kilometers of the park's border which has incentivized vast improvements in infrastructure (Rio2016.com).

The fact remains, however, that while the world arrives to the doorstep of the Pedra Branca State Park, there are still families living within the park who subsist on small scale farming – a humble flock of free range chickens and the income from the sale of their harvests in the few local markets where they are permitted access. In addition, there are still residents living within the park and around its borders whose homes have bare floors while twenty-five story apartment complexes are constructed next door. This place where urban-surroundsrural is demonstrating how urbanization and globalization processes transform the landscape. The spatial relationships between society and nature can be understood through observation and dialectical analysis of the interactions between the city, the forest and society. As Lefebvre (1996) writes:

To think about the city is to hold and maintain its conflictual aspects: constraints and possibilities, peacefulness and violence, meetings and solitude, gatherings and separation, the trivial and the poetic, brutal functionalism and surprising improvisation. The dialectic of the urban cannot be limited to the opposition centreperiphery, although it implies and contains it... Think the city moves towards thinking the world (thought as a relationship to the world)... globality as totality... the universe, space-time, energies, information, but without valuing one rather than another... One can hope that it will turn out well but the urban can become the centre of barbarity, domination, dependence and exploitation... In thinking about these perspectives, let us leave a place for events, initiatives, decisions. All the hands have not been played. The sense of history does not suppose any historic determinism, any destiny (Lefebvre, 1996, p.53).

In other words, an understanding of the social metabolism of the city (spatial relationships) and how the city is fed by various resources, including the forest, can uncover resource utilization and explain why certain resources are valued while others are ignored. If conflict that arises from the valuation of material goods is one of the defining relationships of urbanism, then the most telling discoveries about urban reality are those relationships that retain value over time. A relationship like hunting that persists when there is no longer an explicit need, even if only a minority participates in the activity, confirms the existence of Lefebvre's (1991) underpinning values within a social space that help to understand how space is lived, perceived and conceived.

How then does hunting reproduce social relations? Lefebvre (1991, p.229) will explain that space occupied by the links between groups, the members of the groups and between society and nature without the abstractions of conceptualized space gives "direct expression... to the relationships upon which social organization is founded". In attempting to understand these spatial relationships, observation of only the representations of space merely result in a reduction of lived experiences. For example, the basic elements of hunting include hunter, prey and tool and while these objects are important in the study of this social relationship, they fail to tell the entire story. Lost in such a singularly-focused investigation is the "fragmented and uncertain connection between elaborated representations of space on the one hand and representational space (along with their underpinnings) on the other" which Lefebvre (1991, p.230) tells us is the *object* of knowledge. Lefebvre (ibid) then states that "this 'object' implies (and explains) a *subject* – that subject in whom lived, perceived and conceived (known) come together with-

in a spatial practice". Therefore, exploring the relationships, the links and the underpinnings that exist in the reality of the hunter will shed light on what sustained this activity. In addition, hunting can be broken down to understand how Lefebvre's (1991) absolute space (space constructed over time through lived experiences) conflicts with abstract spatial practices (political hegemonic and institutional power pushing for a homogeneous reality) to create differential spaces where the rhythms of everyday life open gaps so that, as Thrift (2009, p.92) states, "people are able to use events over which they often have very little control to open up little spaces in which they can assert themselves, however faintly".

Through interviews with hunters, it was possible to understand how space had been "shaped and molded from historical and natural elements" in the context of political processes and filled with ideologies (Lefebvre 1976, p.31). Historical elements of the hunters' stories included migration, poverty and struggles against the state. Many of the urban hunters interviewed had incomes that placed them in the lower third income bracket. Often they lived in concrete and brick homes which they built and continue to maintain. One third of the hunters interviewed lived in residences with bare-ground floors, within walking distance of the PEPB. Other interviewees lived within the current boundaries of the PEPB and must comply with specific state-imposed regulations in order to continue their residence. Yet, this marginalized section of society was (and still is) inundated with the material products of the urban world through television, the newspaper and even the sides of buses which carried them to and from work. However, they found themselves unable to participate fully within that urban space. Therefore, hunters exerted what little power they had in a form conducive to the society in which they lived. In the urban periphery, hunting provided specific values of use.

3.4.

Hunting's value to the hunter

While a hunt may have provided a little extra meat to the family dinner table, the act of providing was far more beneficial to the hunter and his family. Through hunting, the man of the house was able to provide for his family, fulfilling the expected gender role established for him by society. In addition to providing for the family, hunters interviewed also provided to neighbors, sharing their abundance whenever possible which earned respect and prestige within the community.

Hunting was also a means of diversion. Many hunters who used dogs told stories filled with pride and pleasure as they would remember a favorite dog that was particularly talented or a hunt that went particularly well. Although it is not only the hunt or the ability to provide that makes hunting appealing. The community of hunters, like many communities, is created through shared interests most likely discovered while enjoying a beer and a story at the corner bar. These shared interests often lead to shared values and a set of norms for group behavior which leads to a specific identity for the individual. Hunting, then, provided a subsistence of a different sort. Hunting allowed these citizens living in the periphery to create spaces of representation that were sustainable within the societal structure of their time period.

At this point, hunting has been shown to be capable, in this unique forested landscape surrounded by concrete, of providing *cultural* subsistence, where hunting offered a means of participation in culturally significant relationships within society. Remembering that space, for Lefebvre according to Gottdiener (1993), was both a material product of social relations (a concrete abstraction similarly to the Marxian categories of capital, labor and power) and at the same time a manifestation of relations (a relations itself – the abstract), it is understood, then, that space is a social product and dependent upon relations. Therefore, uncovering the underpinnings that sustained this process sheds light on urban realities in this place. This is no easy task as Thrift (2009, p.85) demonstrates when describing the complexity of space as "the outcome of a series of highly problematic temporary settlements that divide and connect things up in to different kinds of collectives which are slowly provided with the means which render them durable and sustainable".

3.5. Filling a niche and rising spatial tensions

Specifically, the globalization and industrialization previously discussed directly affected the residents of these neighborhoods surrounding the PEPB. For example, many hunters interviewed were also small-scale farmers who utilized the hillsides of the Pedra Branca Massif for agricultural ends. Even today, there are small scale farmers present in the PEPB. What these farmers witnessed was an eroding of a market for their goods as an industrialized agricultural system, supported by the state, produced and sold products at prices the small scale farmer could not compete against. Of course, this industrialized giant is heavily dependent on fossil fuels while the farmers within the PEPB use mules and manual labor. However, proving that space is truly dynamic, today these farmers once again find a market for their products. In fact, some sections of society now covet their "green" harvests thanks to a media filled with images depicting the degradation of the planet and who market "nature" as a commodity. In other words, the farmers of the PEPB have once again found their harvests valued as social space continues to recreate itself; confirming that there is no singularly correct way of structuring space or a single urban reality for every society.

Just as the small family farmer found a niche to fill in order to fit into the social structure in his urban reality, the hunter also used hunting as a means to support his desired role within the community. Hunters live in an urban reality that has valued the appropriation of things and the ability to consume confirmed by Harvey's comments;

Quality of urban life has become a commodity, as has the city itself, in a world where consumerism, tourism, cultural and knowledge-based industries have become major aspects of the urban political economy. The postmodernist penchant for encouraging the formation of market niches—in both consumer habits and cultural forms—surrounds the contemporary urban experience with an aura of freedom of choice, provided you have the money (Harvey, 2008).

The marginalized section of society is then left with a choice, be left behind or find the niche that gives a citizen access to what society currently values. Often, the valuation of appropriation drives individuals to develop strategies, legal or not, that create spatial potentialities within the social and economic landscape. The innovative form discussed in this paper has been hunting. Through hunting, an individual managed an acceptable level of participation within the social structure.

Ironically, it is this same society that also is capable of denying man this role as provider due to unemployment, poor education or other harsh by-products of capitalist urban life. For example, in the face of global pressures, the state continuously moves towards a more utilitarian model overlooking the importance of the individual and the minority. Unfortunately, the state, manipulating space as an abstraction, transforms space into a commodity to be consumed instead of a "space of consumption" (Lefebvre 1991, p.353). Two appropriate examples to the hunter's reality are ecotourism and the more oppressive real estate speculation. Ecotourism feeds off of the current landscape that has suddenly valued nature as a scarce resource that must be observed and experienced as well as preserved. Society is told to seek adventure, adrenaline and nature in addition to Lefebvre's (1991, p.352) qualitative space of "sun, snow, [and] the sea". Of course this "nature" is an abstract representation of space that has been conceptualized in order to be advertised, bought, and sold. This "nature" is as much a social product as the zoo in the center of the city. However, ecotourism does offer potential to the hunter who possesses specific familiarity with the landscape and unique knowledge providing a competitive advantage.

Likewise, the establishment of the PEPB is equally important to the state as a means of controlling urban expansion and speculative real estate as it is to preserving the environment in addition to a stated claim of preserving biodiversity. However, in creating the park, it must be asked what thought was given to the residents who have been threatened with dislocation. In addition, land values in the regions surrounding the park border have soared as globalization sells more "green" (valuing proximity to nature) leading to further real estate speculation in the region. The state perhaps then sees hunting as a threat to this power as the hunter is capable of a specific territorialization through his familiarity with the landscape. At a minimum, allowing hunting in the PEPB would conflict with the idea of preserving and *valuing* nature.

However, hunting is an activity dating back 10,000 years (Miklosi, 2007). Hunting, gathering and small scale farming are perhaps the most natural human activities beyond reproduction. These activities were the foundational ties bringing humans together into a society creating the structures able to support the increasing flow of information and the growth of civilizations. Even as time has passed, hunting can be seen as an activity that provides individuals with connection to locale as well as a sustainable place in society. However, as pressure mounts from all sides of the hunter, the hunter is forced to hide his activity. For example, the super valuation of the land surrounding the hunter's simple home creates further pressures on the hunter. First, the valuation of the land leads to growth in the neighborhoods surrounding the PEPB. Then, this growth brings higher prices in consumer goods. These higher prices force hunters to develop additional strategies for subsistence. The hunter might suddenly use his unique familiarity with the landscape to harvest the scarce resource of the fauna to sell in the marketplace where the meat is more valuable than on his table.

Hunting can also be understood as a means to avoid the risks involved in the stress of family upheaval due to migration or economic uncertainty. In addition, newcomers to any situation are often seen as outsiders until their values and actions are discovered. Hunting has been shown to be an activity where men could measure a newcomer's value to their society. For example, a study in Saragossa, Mississippi, USA shows how a "risk avoidance strategy" is employed by a poor rural community in order to support its social structure:

As for many southern hunters, hunting is considered to be very important from a number of perspectives. First, hunting feeds the community, so it must be considered a significant subsistence, and therefore economic, activity. This activity is especially important considering the high rate of underemployment in the Saragossa community. The second function of hunting is to create and maintain gender identity. As lines demarcating the sexes are blurred in the modern workplace, hunting seems to be an important way of reaffirming masculine identities in this neighborhood: "To engage in hunting is to emulate, to defend, and to advocate what is a tried, proven, and proper way of becoming and being a man". Today, unfortunately, bringing home "dollars" or a regular paycheck is far less predictable. Nevertheless, hunting means strong gender identity, and strong gender identity, in turn, means strong family and community ties... Men who do not routinely contribute to the resource pool, unless they are quite elderly, are generally not respected. The third function of hunting in the Saragossa community is to integrate newcomers (men) into the community. (Young, 2001, p.701).

In the same study, Young (2001, p.702) discusses how slaves in this same area in the 1800s may have utilized hunting to cope with physical and social stress and "to initiate newcomers into the slave community. Such initiations would have been especially important in constantly fluctuating populations".

To better understand the process that is occurring in space, table 2 (adapted from Harvey's (2006) three by three matrix which "places the threefold division of absolute, relative and relational space-time up against the tripartite division of experienced, conceptualized and lived space identified by Lefebvre") breaks down the complex relationships found in the "simple" act of hunting in the Pedra Branca Massif and how in this seemingly rural location, the urban relations penetrate deeply.

	Material Space (experienced space)	Representations of Space (conceptualized space)	Spaces of Representation (lived space)
Absolute Space	forest; dens, hunting stands; caloric value; poor neighborhoods on the border be- tween urban and ru- ral; rifles and shot- guns; traps and bait	state park, the sur- rounding neighbor- hoods closing in on the park; named dens by hunters; maps, trails; food	anti-hunting laws; paca for celebrations; activities that free people from per- ceived marginaliza- tion
Relative Space (Time)	effect on forest bio- diversity and the food chain; species extinc- tion; pressure reduc- tions on domestic livestock	animal behavior knowledge; favorite hunting spots; gener- al attitudes about hunting by society	the tension created due to the illegality of the activity; rela- tionship between hunters and their dogs
Relationa l Space (Time)	hunter prestige in the community; relations formed between friends or family members while hunt- ing; criminal record of animal traffickers	animal rights; movies about wild animal trafficking; percep- tions of the hunter as a true man able to provide; the role of gender	territorialization of space through fami- liarity and unwritten rules; hunter values or lack of values; the bar, the story, the one that got away

Table 2: Spatial elements in the daily life of the hunter (adapted from Harvey, 2006)

Many of the items in this matrix have been described throughout this text. In addition, as Harvey (2006) cautions, it is impossible to completely break space down into a matrix as the relationships are dynamic. What Harvey's matrix allows is a snapshot of the relationships and the conflicts that exist, or may potentially exist, due to these relationships. To illustrate this point, a look at the material aspect of space, seen in the first column, begins with the everyday items important to a hunter and then shows how the relationships within this space are altered over time. For example, a relationship based on abuse of resources may result in a loss of a hunted species and the eventual labeling of the hunter as a criminal.

3.6. Coping with marginalization

Clearly, urban pressures have the potential to alter hunter motivations over time from gaining prestige through the sustained use of forest resources (use value) to a clandestine harvest for the sale of these same resources (exchange value). Therefore, hunting in the rural – urban boundaries within Rio de Janeiro can be understood as a means for men and women to cope with the marginalization encountered in their socio-economic reality. Mathewson (2000) discusses how this process continues to occur in regions with large migrant populations;

Richard Hansis (1998) reports on the growth of harvesting nonwood forest products (NTFPs) in the Pacific Northwest. The main collectors are immigrant workers, mostly of Hispanic and southeast Asian origins, many from peasant backgrounds. Collecting floral greens, berries or mushrooms for urban specialty markets allows for flexible alternatives to wage labor, but often puts the pickers in conflict with the 'native' population, both Euro-American and Amerind, over appropriate use of land, both public and private. Increasing harvests also raise questions of environmental impacts and degradation. Hansis frames his findings in political ecological perspective, but the complementary project of viewing cultural landscape construction as part of the labor process seems equally well suited to this situation (Mitchell, 1996). This is but one among myriad examples of how globalizing pressures on local economies fashion new ecologies and cultural landscapes, some quite archaic in their antecedents. (Mathewson 2000, p.460).

With such intense conflict possible at multiple scales, how can more amenable relationships exist within a spatial context? Primarily through valuing what is important to the individual. This does not necessarily mean that hunting should be legalized and the gates to the PEPB opened wide for any and all. On the contrary, the underpinnings explored in this text which explain why hunting was important to those citizens who undertook this activity should be the focus of future policy and study. What alterations in space would permit these sections of society to be appropriately represented? The easy answers would be to bring them out of poverty, to move them into homes with wood or tile floors. However, that is the trap discussed by Massey (1999) where these citizens are seen as simply behind the rest of us. Giving this section of society a true voice and instilling them with responsibility for guiding their own trajectories is an important first step. However, it is only a first step and as space and social relations are dynamic, there will be many steps that progress and regress repeatedly over time. While macro views of economics and geopolitical interaction have their purpose, visualizing how these urbanization and globalization processes transform the landscape at the lived level

of the individual reveals what is sustainable within space. As Harvey (2000, p.15) writes, "Globalization' is the most macro of all discourses that we have available to us while that of 'the body' is surely the most micro from the standpoint of understanding the workings of society". Observing relationships between human and nature through analysis of the interactions and relations between the city and the forest reveal how these resources were utilized and why certain resources were chosen above others. Hunting is an activity that persists as long as it sustains valuable social relationships and provides a means for exercising power within society allowing the hunter to fill a niche while creating a culturally acceptable identity. **3.7.**

Cultural subsistence and identity construction

For the urban hunter, with easy access to markets and thus sufficient rations, the most common motivation for hunting was a personal choice to partake in the activity. This choice appears to be focused on creating a cultural identity within a socio-economic setting. At the urban level, in the heart of the city, local governments can introduce social welfare programs to ease the disparity between classes. Likewise, programs like the *Bolsa Familia*¹ operate at the national level of government with many of the same goals of strengthening families by raising them out of poverty and giving them opportunities such as education or job opportunities. However, equally important to any man, woman or child is a personal feeling of value and belonging. Hunting was one form of creating a unique identity, allowing the hunter to gain status and prestige through providing an otherwise unavailable resource to family and neighbors. Even today, although illegal, hunting continues due to economic incentives in black markets.

Daily events, both ordinary and extraordinary, are the building blocks for the value that an individual places upon his or her place within society. And an individual's desire for a place within society is a social hunger that must also be fed. In this situation, hunting returns to being a subsistence activity; however the goal of the activity in this region and time period is cultural sustainment instead of caloric intake. A previously mentioned study in North Carolina, USA demon-

¹ Brazilian social welfare program that provides money to families whose children receive vaccinations and regularly attend classes.

strates well how hunting establishes self-identity and forms community relationships;

Dog hunting was a constitutive part of identity for participants. The practice defined who and what they identified with and how they differentiated themselves from others. Narratives shared by informants wove dog hunting into the social fabric constituting family, community, self, and means for addressing disturbances (e.g., death, illness, migration) to these key elements of identity. Dog hunting provided a stable platform upon which dog hunters could create and maintain relationships in a local social context. (Chitwood et al., 2011, p.138).

However, hunting is more establishing friendships with hunting buddies.

An interview with a small scale farmer revealed how he is still living the way his father and grandfather did, utilizing many of the same techniques in working with the land. He discussed how hunting supplemented their diet when he was young, which reduced pressure on domestic livestock such as chicken and pigs. Yet, the majority of local residents who migrated to the city worked within the urbanized area in construction, services or other similar employment. They did not work directly in the forest, yet because they lived in areas such as Camorim, Vargem Grande, Pau de Fome, or Campo Grande, adjacent to the Pedra Branca Massif, they saw the forest as an opportunity to, as Thrift (2009, p.92) states, "open up little spaces in which they can assert themselves". Nearly all hunters interviewed gave the impression that hunting was a way of integrating into the social fabric of their neighborhood. For example, interviews during fieldwork in the Pedra Branca Massif consistently revealed that a successful hunt was often followed by a community feast or at the minimum, a sharing of what was harvested. Women described their husbands' efforts heroically, clearly proud of what the hunters were able to provide to family tables. Food is often central to cultural activities as described by Dantas (2004):

A alimentação é um sistema simbólico complexo que desempenha um papel fundamental na vida social. Constitui-se também como um sistema de comunicação em que está implicado um conjunto de símbolos que servem de critérios de pertencimento e identidade para um grupo social. É fundamental na construção, reprodução e manutenção das sociedades humanas, uma vez que organiza a sociedade, gerando vínculos sociais que servem de intercâmbio interpessoal. Cada cultura define suas práticas alimentares, onde são estabelecidos os critérios que determinam quais os alimentos que podem ser ingeridos e os que são perigosos para o ser humano. Por meio de representações sociais e individuais, normas e processos técnicos são estabelecidos às condições e as ocasiões ideais para injesta de cada comida. [Translation... "Food and food preparation are part of a complex symbolic system that plays a fundamental role in social life. It is also a system of communication that implies a set of symbols that relate a specific social group's identity and criteria for group entry. It is fundamental in the construction, reproduction, and maintenance of human societies. As a society grows, food generates social bonds that allow interpersonal exchange. Each culture defines its own dining customs; which foods are edible and acceptable and which are dangerous. Through social and individual representations, rules and techniques are established that dictate the ideal way to ingest each meal."]¹ (Dantas, 2004, p. 4).

The same actions have been observed by Candido (1971) in peasant societies in rural São Paulo. These poor communities felt it their duty to share meat whenever they killed a pig or game, even to the point of not receiving any themselves, yet this act created a sense of solidarity among members of the communities. For this reason, Peterson (2004) argues for hunting's social legitimacy. He states that hunting creates social capital which "refers to the ability to secure benefits through membership in communities and other social structures and motivates observance of group norms" (2004, p.319). Candido (1971) points out that hunting is a multidimensional projection of power in the feeding of a population, dealing with complex systems affecting emotional, magical, artistic, political realms. Thus, the environment becomes humanized in both senses of the word: a projection of man with its needs and his plans based on those needs which appear fully, according to what Marx had wanted, as a construction of culture (Candido, 1971, p.28). It was the social interactions and the ability to provide for family and community that made hunting in Pedra Branca Massif a precious resource, not the calories ingested.

However, as Santos (2009) reminds us, it is ultimately space (and spatial practices) that determines which objects and techniques remain and which are replaced. Therefore, with the introduction of technology such as refrigeration, mass production and distribution, modern agricultural methods, and other means of diversion, hunting for sustenance (whether of body or soul) has declined. The decline in hunting can be attributed to the changing social landscape listed above. However, the "natural" landscape has drastically changed as the forested state park replaced most small farms. The next chapter discusses these "natural" changes in the context of hunter perceptions during a period when many of these hunters experienced an elevation in their socio-economic status. These discussions shed light on the ever-changing landscape of Rio de Janeiro's urban forests.

¹ Translated by author.