USING ORAL HISTORIES TO STUDY THE INFORMAL NARRATIVE INFRASTRUCTURE IN FAMAGUSTA WALLED CITY

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Presented at DAKAM: CONTEMPORARY URBAN ISSUES CONFERENCE IV, December 2018

Abstract
In the antique oral compendium *Alf layla wa-layla*, the fictional storyteller Scheherazade told tales nested to avoid her own demise (Burton, 1885). She demonstrated a method of preservation that relied upon a continuity of stories that holds the attention. The over-arching theme of *Alf layla wa-layla* is to tell stories to further persist.

Lacking stories, or the ability to tell stories, people cannot learn from one another. A story explains a cause and effect relationship and assigns cultural or personal meaning to the relationship. The human is a story-telling animal (Throgmorton, 1992) and it is difficult to define any culture without telling their story. While media types have proliferated, oral storytelling plays the most diverse roll in the history of society including teaching, mapping, entertainment, or convincing others of an argument (Brand, 1991; Throgmorton, 1992; Jackson, 1994; Childs, 2008; Rykwert, 2013). The persistence of cities is predicated upon leveraging policy (stories) to combine efforts and pool resources.

The majority of cultural memory is not formalized, resulting in casual loss of culturally relevant urban fabric or biome. A **narrative infrastructure** is composed of the built fabrics and biome that hold the externalized memories of individuals and communities (Childs, 2008). The narrative infrastructure is a public resource to be protected against the dangers of natural disasters and urban renewal, both of which could "*engender a kind of mental health crisis that impoverishes individuals and can destroy a community.*" (Childs, 2008). Being composed of both a sequence of relevant events (a narrative) and a three dimensional matrix (infrastructure), the individual and groups of people adopt specific spaces for the exercise of personal and group identity (Proshansky, Fabian, & Kaminoff, 1983; MacKian, 2004).

As people tend to ignore the majority of sensory data they are exposed to, mapping this sense of place charts a city that appears to be nodes of consequence associated by largely fictional narratives. People's memories of their domains are fungible, and their actual sensory interaction with those changing domains constantly demands the individual renew their domain: "*The way we narrate the city becomes constitutive of urban reality, affecting the choices we make, the ways we then might act.*" (Sandercock, 2003: p.12).

Working with the Famagusta Walled City Association (*Mağusa Suriçi Derneği*: MASDER) on the island of Cyprus, this study of informal oral histories of MASDER members employs narrative analysis to map a narrative infrastructure of the Walled City.

Keywords: Narrative, oral history, storytelling, urban planning, urban design

1. Introduction

The proposed goal of urban change professionals is betterment and sustainment of urban human activity. To aid in the achievement of this goal, here proposed is an abstract framework to study different aspects of the urban human condition – both in isolation and through their interactions. To describe an individual urban dweller (actor), how those dwellers interact (actor network), and the built fabrics derived from those interactions it is necessary to draw upon authors generally researching psychology, sociology, and political philosophy.

Hanna Arendt's (1959) text *The Human Condition* identifies narrative as one of three legs of civil society. Through the analysis of Hellenic classical authors, Arendt describes the early citizens of Athens attempting to

differentiate themselves from the typical tribal system of governance. Storytelling, through the application of rhetoric, was the principle way of defining the public sphere (Tassinari, Piredda, & Bertolotti, 2017). Inspiring the action of others towards a common purpose—a politician—is founded upon rhetoric. The core of storytelling technique leverages the human mind's predilection for seeking patterns of cause and effect (Schank, 1990; Gottschall 2012).

In abbreviation of Arendt's description of ancient Athenian social structure, it was a collection of laborers, workmen, and citizens. The laborers provided for the daily (definitively perishable) necessities of mortal life. Workmen built the artifice of durable improvements to urban life: tools, huts, pottery, etc. The citizens inspired action through rhetoric or acted to improve all actors' condition by laboring or working together: common defense, civil infrastructure, etcetera. From this division of civil society, Arendt describes all polis as mixtures of people who tend to specialize in these activities (**labor**, **work**, **action**; Figure 1) but also as individuals engage in all three activities to differing degrees.
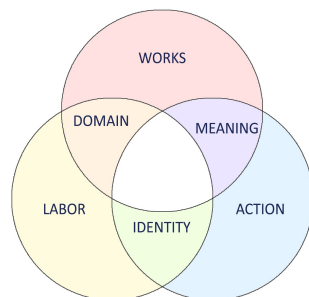

Figure 1. Narrative Infrastructure

These three elements of Arendt's human condition are not confined to the urban context. They must tell a story, agree to the moral, and act. To forge coalitions and combine the efforts of many, it is critical to tell a story. Thus, cities are residue of narratives and stories (Childs, 2008; Rogers, 2013; Bakshi, 2014; Filep, Thompson-Fawcett, & Rae, 2014.) In order to study Arendt's elements in the urban context, both spatially and temporally, it is necessary to integrate them with three sub-elements: **domain**, **identity**, and **meaning** (Figure 1).

Arendt defines a **laborer** as one who engages in effort to develop a product with limited persistence (such as bread, but not a brick.) In contemporary society most people engage in a certain degree of labor on a daily basis, while some rely on it as a vocation. For the purpose of the narrative infrastructure, a laborer, person, or actor is defined by how they differentiate themselves from others (their identity) and the physical extent of their activities (their domain).

Similarly, many people are professionally engaged as **workers** creating different durable goods or products meant to be used in the creation of durable goods or ideas. A work can be described as a product meant to persist that is imbued with cultural meaning and is emplaced in a distinctive domain. The domain can be arena of human endeavor for which a boundary can be described.

When members of a society wish to change how the society works, they must engage in either direct **action** to effect change, or inspire action of an audience with their story or rhetoric. Their goal is to establish a theme/meaning behind their action or story worthy of being adopted either as law or policy. Such meaningful results become the guidelines for the creation of the works of the society.

This element of action is the venue where all public works are initiated. As such, the role of the urban change professional originates from a need for action expressed by the public. Based on the recent literature, it appears necessary for both comprehensive and incremental urban change to be informed by study of all six elements (see Figure 1) Urban change professionals should consider:
1.	The living - **laboring** - people, and how they manifest subjective wellbeing (Arendt, 1959).
2.	The rituals and temporal patterns that people use to individualize their **identities** (Jackson, 1994).
3.	The immediate context where identity has established a **domain** (Rykwert, 2013).
4.	The historical context and technical **work** abilities of the society they exercise to achieve contentment (Arendt, 1959).
5.	The themes, or **meaning**, of past actions and stories that grant continuity with the past and future of the society and thereby forms the basis of policy (Jones, McBeth, & Shanahan, 2014).
6.	The **actions** and narratives that are competing for the publicly shared commodities (Arendt, 1959).

Since urban change professionals operate from the arena of action and narrative, the approach described here is termed **narrative infrastructure**. It is a study of the structures that under-gird human society through the narratology lens.

A community's stories of crises and resolutions can be distilled to a moral that can be captured and codified to

ensure that the civil compact is preserved and incivility is diminished. Policy developments reflect the morals of stories told to policy makers. Such stories are filled with affable characters set on a specific stage and in a distinct era.

As facilitators of the public interest, planners and urban designers cannot engage the public without telling and listening to stories. Schank (1990) and Kahneman et al. (1990) have described a neurological propensity for narrative within all human beings that predates urbanization. While previous research has addressed both story and narrative's role in creating policy and the resulting urban fabric, the feedback loop between actors and their urban fabric has not been modeled and tested. This study suggests that local stories constitute a narrative infrastructure: spatially-bounded patterns of human affect that influence the morphology of cities.

To understand the land-use policy implications of the Walled City's narrative infrastructure, it is necessary to define what a narrative is and how it evolves in civil society. With that information, it is possible to propose how to manipulate narratives to improve the quality of life in cities. First it is imperative to determine the spatial distribution of narratives.

Using a case study of four narrative histories from Famagusta, the research concludes by differentiating how these themes manifest in the polis informally and examines how authors have suggested different narrative approaches to changing the urban fabric or policy. The brevity of this research reveals several opportunities for future inquiry into the way narratives respond to urban morphology and how future urban morphology could be informed by community narratives.

2. Framing the Narrative Infrastructure

Building upon the advancement of structuralist theories of narrative arising in the 1960s, the "*narrative turn*" (Kreiswirth, 2005) has been employed widely in humanistic fields in the last several decades. "*La narratologie*" (narratology) was coined by Tzvetan Todorov to describe what French structural linguists (e.g., Roland Barthes, Claude Bremond, Gérard Genette, and A. J. Greimas) used to marry their theory of language with Russian Formalist literary theorists (Herman, 2009). By joining the study of the written text with a general theory of language, the French theorists turned the structures of the scientific study of plot, setting, characters and the other dynamics of literature into cognitive science and made them available to the humanities including spontaneous conversations and historio-graphic writing to visual art, dance, and mythic and literary traditions (Herman, 2009).

This cross-disciplinary approach has increased since the 1990s (Schank 1990). A semiotic bridge between the fields of narratology and urban studies owes a considerable intellectual debt to Claude Lévi-Strauss (1963) whose opening chapters of Structural Anthropology build the link between structural linguistics, anthropology, and social laws.

Structural anthropology studies have long been applied to narratives, both oral and written. This methodology is useful for comparing narrative content generation to generation and region to region – this is to say over long time-spans and vast regions. Only recent science has focused on narrative policy analysis (e.g. Molotch, Freudenburg, & Paulsen; McBeth; Yanow; and Throgmorton) and the built fabric of cities (e.g. Childs and Mazrui).

This research relies on Arendt's (1959) theory of the human condition (**labor**, **work**, and **action**) as a scaffold on which is hung the theories of these contemporary authors. These authors crossing disciplines between cognitive science (e.g. Schank), ritual-affirmed **identity** (e.g. Jackson), place identity (**domain**, e.g. Proshansky, Jacobs, and Alexander), the artifice of culture (e.g. Mazuri and Molotch), urban design and policy (e.g. Childs and Jones), and emplaced **meaning** (e.g. Sandercock and Rykwert).

Labor: The product of labor is specifically not meant to last, but to be consumed immediately. The procurement of food from a plant, the baking of bread, the cutting of grass—each is a labor. The laboring actors are specifically focused on daily needs as opposed to creating durable goods or forging a better union among the polis. The somatic, often rhythmic, use of the body in labor, Arendt (1958) claims, induces greater subjective well-being. In other words labor is the cause of the emotion of happiness.

Identity: Identification with an abstract concept or physical fabric beyond the actor's body requires repetition to affirm the association in the minds of other actors (Proshansky, Fabian, & Kaminoff, 1983; Schank, 1990;

Jackson, 1994; Molotch, 2000). An actor need not raise their hand to claim to own hands, but for an actor to claim to own a stick it is sociologically necessary to exercise that claim by routinely possessing the stick with their hand. The process of encapsulating the manufactured world and fellow actors via identification, whether of necessity or comfort, results in a sense of safety by bodily inhabiting the space and associating with those co-actors (Proshansky, Fabian, & Kaminoff, 1983).

In this way, identity is a social compact extended to objects, concepts, and actors but requires a reification or ritual. The actor thereby defines themselves and their value to the society with the goal of receiving affirmation from the community (Maslow, 1943). The practice of identity requires a variety of ritualized actions, which is the physical manner of expressing a narrative.

Domain: Relationship between the domain of an actor and the actor's memory appear related to first- and second-order thinking modes. Memories are physically outsourced to the ritually-used landscape to reduce the necessity of first-order thinking. Physical items that are novel or discovered in unexpected locations will stand out in the actor's memory as discontinuities, forcing the actor to update their mental map for use during their next visit. Actors must exercise skills of mimetic environmental control in changing the setting, the behavior of others, or his or her own behavior (Proshansky, Fabian, & Kaminoff, 1983).

The confusion caused by too rapid change in an actor's expectations of their domain appears to result in a phenomenon akin to a mental health crisis (Fullilove, 2004). An actor's domain is defined by their memories of the urban fabric and biome: "*At the core of such physical environment-related cognitions is the 'environmental past' of the person; a past consisting of places, spaces and their properties which have served instrumentally in the satisfaction of the person's biological, psychological, social, and cultural needs.*" (Proshansky, Fabian, & Kaminoff, 1983: p.59)

Works: Every tool is designed to effect a specific desired product, be it another work or a support of labor (Arendt, 1959). Each artifact is designed for the task with which it is engaged, not the resulting human experience of the benefits of the work or labor. Whereas consumption is the point of products of **labor**, the inevitable destruction of the product of **work** is incidental to its use (Arendt, 1959). The artifact's durability is eventually used up, weathered, eroded, or destroyed by natural disaster, but only after it has served its purpose many times.

Though it fails, the built environment is composed of all that has been brought from the raw to the finished state with the intent to endure. The process of transforming raw materials by violence into assemblages of works, the *homo faber* becomes a creator of his or her own solutions to problems "*…in order to erect a world, not—at least, not primarily—to help the human life process*" (Arendt, 1959: p.132). If decay is the presence of problems, that which alleviates decay promotes life. Thus by supporting labor and alleviating decay, the work becomes associated with the life and subjective well-being of the actor.

Meaning: The work of an artist, or architect, or writer is not the source of cultural meaning. Neither is the creator the source of the cultural meaning. The meaning is established through interpretation by the audience (Throgmorton, 1992). This share of the meaning of a work belongs to the audience. The phrase "*the beholder's share*" was introduced by the Austrian art historian Alois Riegl and denotes that part of an artwork's meaning which must be contributed by the viewer (Gubser, 2005).

This degree of agency granted to every individual who consumes narrative of all types foists the individual into the action of the narrative, hence they are each **actors**. At the least they must take the cognitive action to ignore a narrative, if not actively accept or reject it for its implications. This action requires them to replay the narrative in their own mind, but being within their mind, its interpretation is greatly influenced by the memories of the actor.

Meaning is used here in the sense that an artifact, idea, work of art, or piece of writing defines the culture beyond the artifact's original function. The preoccupation of actors with preservation of their identities makes meaning an important part of promoting the preservation of any artifact or idea (Dunstan & Sarkissian, 1994). According to Dunstan and Sarkissian (1994), every actor and actor network has a **core story** that is composed of elements of their narrative that are interlinked with meso or macro narratives of their domain.

Action: The results of actors exercising their agency – exchanging stories and inspiring common action – are

inherently unpredictable (Case, 2017). The diversity of personal histories and skills of all the actors combine into a new shared sense of meaning that will be specific to the moment and location (Arendt, 1959). Unlike the gardener who can predict crop yields or the engineer who can calculate the point of failure of a beam, an agent of political change, whether by mute action or political persuasion, cannot guarantee the stakeholders any particular policy outcome. "*This insertion [into the affairs of the polis] is not forced upon us by necessity, like labor, and it is not prompted by utility, like work... To act... means to take initiative, to begin,*" (Arendt 1959: p. 157)

2. Spatio-Narrative Methodology

Setting aside the formal process of land-use policy, contested space is a chief concern of the urban change professional. To understand contested domains, it is necessary to abstract the domains to a common map. The abstract boundary provides an extent to the contest, and helps to identify other actor networks who may be unaware that their domain is contested. Through the process of describing the rituals of an actor network and how they are reflected in the space, the competing actors have the potential to enter into a dialog about how domain is used, and this is the first step to discovering how to share a domain.

The process of mapping of a domain is a seizing of fabric or biome. The map or artifact record publishes a narrative of the actor's identification with a specific fabric. The act of assembling the narrative around the artifacts or landscape requires the community at large to address the defined claim on contested space. Overtly or subversively, the meaning or theme of the map or catalog is not legal title, but the physical fabric is an extension of the actor's natural person (Caquard & Cartwright, 2014).

The method proposed is calibrated to identify urban-fabric disassociation by the populace and suggest potential remedies in the context of an evolving city. Within the narrative infrastructure framework, the tools of narrative analysis were employed to better manage urban space. The method proposed for the case study is focused on capturing and contextualizing local narratives that contribute to the actor's definition of place.

The process utilized in the case study required three steps:
1. Thematically code the recorded stories using a priori codes based upon the theoretical model.
2. Map the extents of the narratives.
3. Identify un-storied space and compare it to land-utilization.

Context of Famagusta On the island of Cyprus, Famagusta is composed of a historic walled city with commercial port, a university-oriented development to the north, and the involuntarily-abandoned development of closed Varosha to the south. The military of Turkey, the United Kingdom, and the United Nations all occupy significant parcels around and within Famagusta. The geographical location of the Walled City is upon a sandstone geologic formation separating a seasonal river from the Mediterranean Sea.
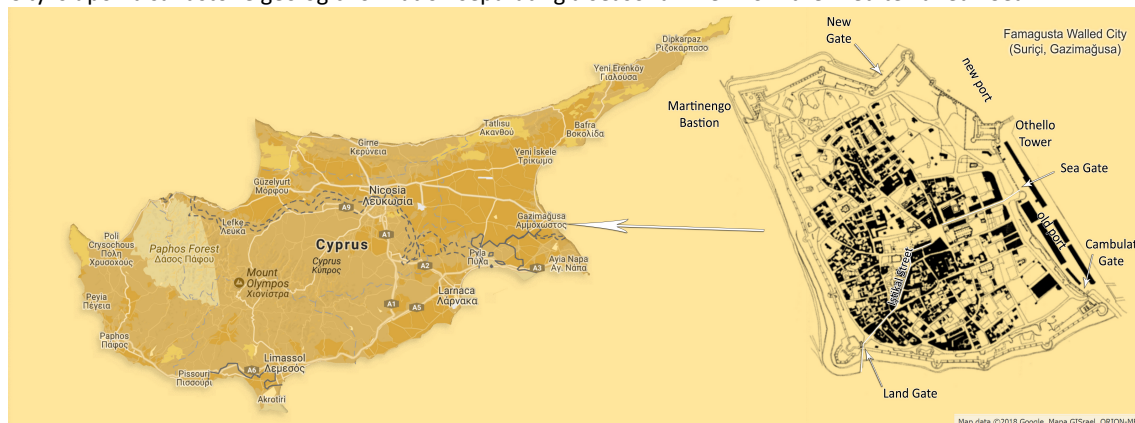

Figure 2. Cyprus and Famagusta map

Historically, Famagusta has had two dominant ethnic groups. However, the residential population of the Walled City has been predominantly of Turkish descent since the mid-seventeenth century (Dağlı, 2013). As a border city between the eastern and western urban design paradigms, Famagusta expresses a layering of urban fabric from Venetian, to Ottoman, British, and now Turkish influence.

Pre-twentieth century Famagusta is largely defined by the limitation of two gates. The Ottoman reliance on Famagusta as an open-air prison for political prisoners was functionally supported by the limited access. The axis between the Land and Sea gates established the Iştikal Street as the high-street connecting the Land Gate and the Sea Gate. The development of privately owned construction focused on the high-street leaving the less accessible Cambulat area (south-east quarter) and Montenegro (north-west quarter) for military use (Figure 2). This development pattern was maintained until the British colonial period when multiple additional gates along the sea wall were opened. Montenegro, lacking a gate still, is the least-developed quarter of the Walled City.

Compared to the Walled City, the land-use patterns of greater Famagusta exhibit significant modern influence – if only indicated by street-width. That indicator alone suggests a change of values for land-use from maximizing built area to a greater desire for vehicular transportation. This is one example of how a need, expressed within the stories about traffic, has changed land-use policy significantly in the past century from Ottoman and English empires to a mixture of twentieth century English and modern Turkish.

Between 1960 and 2018, the Walled City has experienced approximately an 85% population decline (Dağlı, 2013). This out migration has been caused by a variety of factors but the result has been an observed disinvestment in the urban fabric. The condition itself expresses a narrative of decline that is reflected in interviews with *extra muros* residents. Within the walls, a neighborhood association (MASDER) continues to salvage some of the narratives of early-to-mid twentieth century Walled City life by recording the oral histories of residents.

Sample Characteristics The recorded narratives were acquired from MASDER leadership, and were recorded at the scheduled meetings of MASDER from 2016 through 2017. The attendees were typically long-term or past residents of the Walled City, and tended to feel free to contribute in the speaker's narrative. This did lead to an unfortunate amount of unintelligible cross-talk, and intra-group subject matter that was not generally clear to the translator.

The membership of MASDER is largely made up of older community members who were raised in the city from 1940 to present day. The members can be described as engaged community members who appear to care about how the Walled City will change. While the database includes forty-six narratives, this study includes four (N=4) to demonstrate the method of mapping narrative infrastructure.

Applying the Codes The recorded narratives were interpreted by an architect and translator local to Famagusta. The resulting transcripts were coded using Atlas.ti by applying the six themes of narrative infrastructure: labor, identity, domain, works, meaning, and action. Where stories within the narratives were composed of multiple **narrative codes**, the over-arching intent of the actors was chosen as the theme to be recorded in the narrative infrastructure map as **locative codes**.

Narrative Analysis The total occurrence of the codes in the recordings is as follows:

Narratives versus Locative Codes	Ahmet		Mehmet		Kerem		Sevel		TOTALS:
	narrative	locative	narrative	locative	narrative	locative	narrative	locative	
ACTION	27	5	16	5	26	3	9	4	78
DOMAIN	32	7	5	1	24	5	21	4	82
IDENTITY	14	3	6	1	22	4	18	1	60
LABOR	6	1	6	2	2	1	12	0	26
MEANING	16	2	10	2	17	2	8	1	51
WORK	30	5	8	2	28	2	3	0	69
TOTALS:	125	23	51	13	119	17	71	10	366
Percent of Locative Stories:	18%		25%		14%		14%		17.21%

Table 1. Code Occurrence by theme and speaker, narrative versus locative.

Within the individual stories, there was a tendency for the narrators to incorporate multiple themes. The cooccurrence analysis demonstrates the tendency for themes to be dependent upon themes to flow of the narrative communication to the audience:

Code Cooccurrence	ACTION	DOMAIN	IDENTITY	LABOR	MEANING	WORK
ACTION						
DOMAIN	6					
IDENTITY	2	3				
LABOR	1	3	1			
MEANING	1	0	0	0		
WORK	2	1	1	0	0	

Table 2. Code cooccurrence within the same stories

Defining the Effective Context of the Individual Narratives Thematic components of the narratives that specified physical locations were then mapped using ArcGIS (Figure 3). Where a purposeful trip initiated by an actor would comfortably extend to ten minutes at three kilometers per hour, this study assumed a leisurely walk of five minutes allowing for the typical focused attention span of five to ten minutes (Bradbury, 2016). Consequently, each narrative was limited to a zone of influence extending along the street-network to a distance of 250 meters. Said zone extends beyond the street center-line 10 meters to encompass the front, left and right facades of adjoining properties which would provide the contextual cues for the story settings.
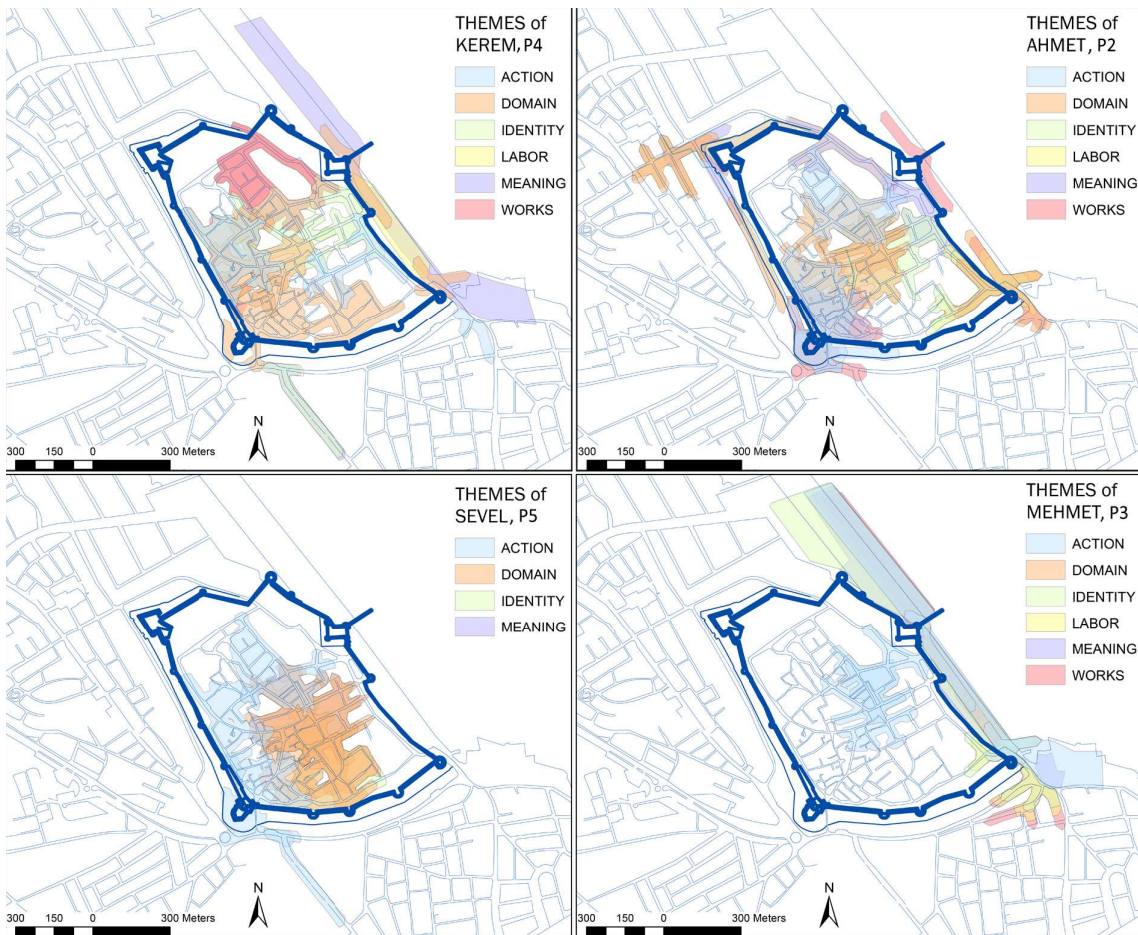
Narrative Distribution

Figure 3. Maps of actor's narratives by thematic code

Equipment and Software
The videos were collected with an SLR camera (1920x1080 pixels) on a tri-pod using the internal microphone.
The translations were performed using Google Voice combined with VLC Media Player 3.
The transcripts were processed and coded using Atals.ti 7.5.
The maps were developed with ArcMap Desktop 12.2.2.

Spatio-Narrative Analysis Once each coded story was mapped, the zones were overlaid (Figure 4) with other narratives of the same code to find areas of the Walled City that influence the narrative character of place (two or more narratives), and to identify areas without any measured narrative influence.
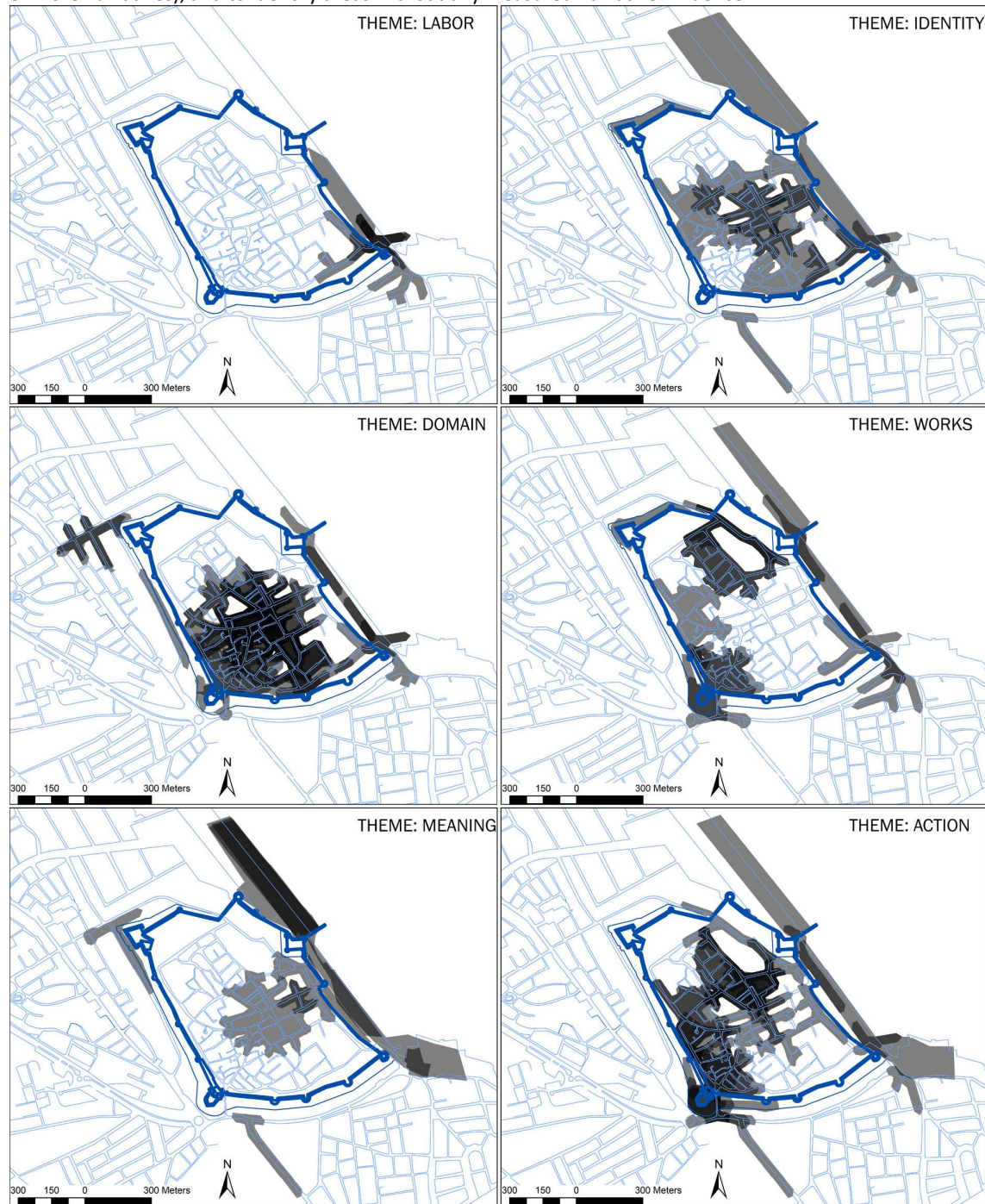

Figure 4. Combined thematic analysis of all narratives

4. Discussion of the Meso-Level Thematic Analysis

The meso-level narratives are the most impacted by the built fabric. Micro-level narratives operate on time-scales that assume the surrounding fabric as the domain, and the extents of the rituals in time are too brief to conflict with the shape of the works. As a result, the micro-narrative appears to conform to urban fabric where the meso-narrative has enough use by the agents to trigger a cycle of domain contest: questioning the state of the works to support the domain that encapsulates the identities.

In this data set, the high number of domain codes is a reflection of the general mission of MASDER. In bringing actors together as a group to discuss their memories of an urban fabric, a significant portion of each recording is composed of participants discussing the precise location of the individual stories. For instance, the population division of both play and learning between the two communities of children ensured a separated identity which eventually resulted in domain contest. Per the general theory of narrative infrastructure, only through sharing rituals in the same space together will it be possible for the two communities to develop a common sense of identity and shared domain. This conclusion is not new information for the local actors:

[Speaker: One of the men inside the room]: "*There used to be a Greek School in Famagusta. It was for the Greek who has lived in Famagusta.*" [Speaker: Kerem]: "*Yes, it was established in 1957. But it could just teach for a year. After EOKA's attacks started, all Greeks ran away from Famagusta and that school was closed.* [Unintelligible] *That school was used as a court and library. When I was a principal in Cambulat, I told that we should have the school but they didn't accept.*" (Recording P4, lines 113-115)

By theme, the following observations were made from the data:

Labor: Even though labor was the least represented narrative theme amongst the recordings, they are all co-located around the Cambulat gate and the old harbor. This geographic specificity strongly suggests that the community relates to this area as a locus of both industriousness and subjective well-being.

Identity: The sense of identity in the narrative infrastructure is largely distributed throughout the study area. Though there are twice as many stories about identity as labor, the highest concentration is less than half the narrative density of labor. The lack of identification with the Akkule neighborhood adjoining the Land Gate is the most poignant of the findings about Walled City sense of identity. Either the MASDER attendees for these four recordings had no prior relationship with this neighborhood due to economic reasons (Akkule was identified as more affluent neighborhood, whose inhabitants might have afforded moving away from Famagusta), or there is a genuine cultural disassociation with the area around the Land Gate.

Domain: Given the mission of the MASDER to collect stories specifically about the Walled City and the narrative infrastructure theory's focus on locative stories, in this data set the domain narratives are both numerous and evenly distributed. The voids in the domain narrative infrastructure near Martinengo Bastion, New Gate, and just west of Cambulat Gate suggests a chronic lack of usable fabrics in these locations. Lacking any commodity and (in the case of Martinengo and Cambulat) accessibility, these areas have not been incorporated into the narrative sense of place.

Works: The speakers identify three major works of mid-twentieth century Famagusta:

"*Then we can say that The Harbour, Namık Kemal High School and Türk Gücü were three things that were essential to the progress of Famagusta. These are the symbols of Famagusta.*" (Recording P4, line 162)

The harbor figures prominently in the narrative infrastructure, with 20% of the mapped narratives located at or near the harbor. Türk Gücü football club and the considerable gardens and orchards behind the club house encompass 14% of the narrative infrastructure. The Namık Kemal High School, being outside the walls, had no other nearby narratives with which to associate, but stories about the high school alone represent one in every twenty mapped stories.

Overall, the pattern of the works narratives describe a fringe-belt starting at the Land Gate, and proceeding north and east to the harbor. The resulting white space is similar to the spatial extents of the sense of identity of the four agents and their audience. This suggests that the residential, liturgical, and daily business interests established along Iştikal Street and the southern border of the Walled City were built much earlier.

Meaning: As suggested in examination of the works, the meaning narratives are largely focused on school-life and the harbor. The overlap between the two worlds of the harbor and school is supported within the narratives, suggesting that there is a duel roll for students as "*carriers*" for the harbor industry:

"*Let me tell you about something else as a detail, we used to call the workers as carriers; which we call them as dockers now... The people who were just running errands of others were called carriers and carriers would never take offence at us about how we address them. For instance, despite of the fact that duty was a place which offers a better paid job, the people who work there were called duty carriers…It wasn't something shameful. As*

a matter of fact, there was no one who wasn't a carrier in Famagusta; Everyone were carriers; either head of carriers or duty carrier." (Recording P4, line 25)

Action: The narratives of change are distributed largely across the study area, but the two loci are the area near the harbor labor union office and the Land Gate. These two sites include the most stories about economic conflict (harbor) and domain contest (Land Gate). The narrative sense of political place appears to overshadow the Land Gate despite there being little sense of identity to protect. The opposite is true near the port where an equal number of stories of identity were shared as action.

Application of Narrative Infrastructure The project is ongoing, and as the research team continues to add stories to the map interface, new relationships become apparent that change the relationships between the narratives. This iterative approach allows for further integration of the stories and the built fabric. After the second pass, the findings become more ethnographic and less likely to be influencing the built form, and also the built form is less likely to inform the actions of the agents.

Given the lack of narrative infrastructure in the vicinity of Martinengo Bastion, it is reasonable to presume that the adjoining neighborhood and empty fields will be a future fringe development for the new major industry in Famagusta: tourism. As the bastion has relatively poor access to greater Famagusta but ideal access to historic Famagusta, increases in short-term housing could be located in this area without excessive gentrification.

The empty groves to the west of Cambulat Gate suggest future development supportive of a sense of labor and physical entertainment to elaborate on the the pre-existing labor narratives. The marina to the east of Cambulat Gate could similarly be redeveloped to improve the aesthetic of the existing mixed-use marina. Imperative to the sense of labor is the preservation of the limited fishing activities at the marina. Already a popular past-time in Famagusta near closed Varosha, this could be encouraged for recreational and subsistence use with a redesign that included stocking the area with fish.

Shaping the formal Famagusta can be informed by these informal narratives. This following informal story about children not being allowed to play together sketches a rough picture of the children as victims in a tragedy of cultural conflict.

"*The place where Watchmaker Niyazi used to have a shop was an empty field with a garden. We used to play marbles on that empty field. The Greek children wouldn't play with us.*" [Speaker:One of the Men inside the room]: "*I think there was a house there. What happened to that house? Does anyone live there now? I think it's empty.*" [Speaker: Kerem]: "*We were about the same age but they used to watch us but they wouldn't come and play marbles with us since they were affected by their families about Turks.*" (Recording P4, lines 104-109)

Future development, perhaps focused on the aforementioned empty house, could be programmed to provide a function or service that addresses Kerem's narrative but transmutes the story from one of community tragedy to one of comedy. One approach might be to program a cafe or business there named *Losing Our Marbles Together*, thereby achieving continuity between the new function and the original narrative but offering a playful twist on the perceived insanity of disallowing children to play together.

5. Conclusion

This study focused on finding actionable points of leverage to change the polis-narrative through the analysis and manipulation of the narrative infrastructure. The study of said infrastructure is not intended to contribute to the sciences of sociology or psychology, though it borrows from both sciences. Rather, it is a narrative theme analysis of urban interactions between the actors, their expressed identities that bounds their domains, and their narratives that drive land-use policy to shape the urban fabric. The urban fabric influenced actor identity, causing a feed-back loop where the urban change professional could influence the narrative process to adjust the urbanization/acculturation cycle.

Designers are traditionally in the role of finding solutions to problems, and this mentality is ultimately counter-productive for the city and its population due to this lack of predictability (Brand, 1991). This research does not suggest positivistic metrics, deceptive planning methods, or theories of development. Following the examples presented by Alexander et al. (2006) and Uzzell (2008), this research limits itself to fostering locally-relevant generative proposals rather than generalized urban design theory rationales. This degree of complexity demands that the urban change professional strive to overcome the limitations of academic and professional

hubris that tends to favor spatial or economic theory over local narrative (Uzzell, 2008).

Practiced many times throughout contested domains, this approach could become an intentional, if informal, approach to engendering a more integrated urban fabric by demanding continuity between living memory and development/re-development. Given the availability of oral histories stored in archives around the world, narrative infrastructure could provide utility for those archives by informing urban policy in those communities.

The humility of learning to listen to the stories of a community – the pertinent and seemingly impertinent – can potentially elevate the urban change professional to a teller of stories. Like Scheherazade's ever-forking narrative, each community's stories must be retold a proverbial thousand and one different ways every moment – an ever-evolving field of interactions – as people strive for happiness and satisfaction.

Interviews
Participants quoted in the paper (pseudonyms used for privacy):
P2, Ahmet, recording by *Mağusa Suriçi Derneği*, April 2, 2016, Walled City, Famagusta, Cyprus
P3, Mehmet, recording by *Mağusa Suriçi Derneği*, June 25, 2016, Walled City, Famagusta, Cyprus
P4, Kerem, recording by *Mağusa Suriçi Derneği*, December 17, 2016, Walled City, Famagusta, Cyprus
P5, Sevel, recording by *Mağusa Suriçi Derneği*, May 6, 2016, Walled City, Famagusta, Cyprus

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