Urban Vitality: Exploring spatial conditions of 24/7 environments for Netherlands.

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INTRODUCTION

Research Questions:
• What is a 24/7 environment and its accompanying conditions?
• What are the benefits/detriment of a 24/7 environment?
• Where are the existing potentials within Netherlands for a 24/7 environment?
• Is there a role for the urban planner in a 24/7 environment? If so, what?

Structure of the Research
The research is broken up into chapters, with Chapter II to V discussing and exploring the concept, definition and examples of a 24/7 environment. Chapter VI explores the role that the urban planner can play in the exploration of a 24/7 environments. The aim of this project is to come up with ways to identify and understand the 24/7 environment for the urban planning profession.

Motivation:
When we think about cities full of vitality and life spans that go beyond the normal waking hours, we think of global cities such as London, New York which are also capitals of capital, economic strength, buzz and success. Such urban systems make full usage of their structure and elements with continuous processes and flows. (Klaasen, 2004). The research on 24/7 environments was inspired by the difference in time bound spaces between the Netherlands and my home country, Singapore. Being used to easily finding services, retail and entertainment at all hours of the night, the shock of being in a country that in certain parts cease to operate on weekends prompted this explorative study into understanding what conditions are required to allow for a 24/7 environment which contributes to the urban vitality of the space, especially spatial pattern and conditions, and what are the effects of 24/7 environment in general.

Explorative Study:
Spatial planning of today, seldom take into concerns regarding the usage of space in a temporal fashion (Klaasen 2005, Drew 2005). Planning and design are extended within visions and expected goals in terms of years, however, neglect the importance of planning the details of a finer temporal grain is to the vitality and success of an urban area. Given the state of current urban settlements to proceed into sprawl and fragmentation, it seems highly illogical to continue using whatever precious space we have left only within a pre-conditioned notion of time. Not to mention that given

---

1 Urban systems: Klaasen (2005) classifies urban systems as not only cities and urbanized regions but also parts of cities... entities of socio-cultural, spatial-ecological, economical-technical and administrative-organizational elements, relations and processes and add that urban systems are extremely complicated open systems (Doxiadis 1968:188; Peursen 1986:57) while deducing 3 key ideas of attribute (element), structure and their inter-relation from the systems theory, which she cites from Harvey's definition that a system exists of a set of elements with certain variable characteristics (attributes), set of relations between these element-attributes (structure) and a set of relations between the element attributes and the environment of the distinguished system.

2 Temporal grain: smallest difference that we wish to, or are able to perceive, conceive or represent while not yet designating it as ‘equality’ is ... the ‘grain’ of the perception, concept or representation (De Jong, 1992:16)
the limitations of the simplified models of reality that urbanists have been conditioned to work with, the element of time has barely been taken into account, voluntarily or involuntarily. This research is an explorative study into the why and how conditions that makes a 24/7 environment, in describing and propagating the environment.

Bearing in mind that it is not humanly possible to function continuously as our bio-rhythm will never allow it, nor is it socially responsible. This explorative study of 24/7 environments within urban systems looks to spaces that have multiple time, spatial and functional characteristics. The purpose is to understand how these places can be multi-faceted and vital to the urban system.

This is not about …
• creating a 24/7 city
• non-stop activities
This is about …
• exploring the conditions of the urban phenomenon of a 24/7 environment
• confronting similarities from internationally known 24/7 environments
# ACKNOWLEDGEMENT AND CREDITS

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All data sources are quoted in the Quick Scan booklet. The main information and data sets sources are available through:
- URA: Urban Renewal Authority of Singapore
- Tokyo Metropolitan Authority
- J OBURG: Johannesburg City Authority
- City of Toronto
- Ciudad de Buenos Aires
- Gemeente Amsterdam
- Kobenhavn Kommune
- City of Frankfurt
- Comunidad de Madrid
- Greater London Authority
- IAURIF: Institut d'aménagement et d'urbanisme de la région d'île de france
- Sydney Metropolitan Authority
CHAPTER I: RESEARCH FRAMEWORK

[I]1. Exploring the 24/7 environment

In trying to understand a 24/7 environment, these 4 main research questions dealt with are:

- What is a 24/7 environment and its accompanying conditions?
- What are the benefits/detriments of a 24/7 environment?
- Where are the existing potentials within Netherlands for a 24/7 environment?
- Is there a role for the urban planner in a 24/7 environment? If so, what?

Theoretical Model: Condition set informed by literature research

In the preliminary stages, an extensive literature research of case studies, policies and researches relating to multifunctional usage, mixed use, time-space relation, urban vitality and 24 hour economy were consulted to get an understanding of the conditions and examples of 24/7 environments. A theoretical and methodological framework as elaborated in [[I]4Theoretical and Methodological Framework - A summary of key concepts] was built on those studies to understand the concept of 24/7 environment in all dimensions, especially spatially.

A 24/7 city is proposed as one which contains or encourages 24/7 environments and the presence of such environments are signs of extremity in urban vitality and seen as a spatial and social condition.

Condition set refined by confrontation with real examples

In the 2nd phase, concepts and definitions of conditions that contribute to the 24/7 environment is confronted with secondary analysis of major world cities mainly chosen for their 24/7 environments to try and isolate patterns spatial or otherwise in those cities. (See Appendix C for Methodology)

Explorative Research into a 24/7 environment

By undertaking a dual approach explorative study, the motive is to first build up a solid conceptual base regarding the concept of 24/7 environments and confronting that with data and secondary evidence of different locations and readjust both the framework and the analysis for a better understanding of a 24/7 environment, what makes it and question how can an urban planner play a role in something which some chalk up to a set of favorable circumstances.

Research Aims:

- Exploring, Understanding and Defining the 24/7 environment (especially in spatial terms)
- Quick Scans of 10+2+1 Cities.
- Toolset for the urban 24/7 planner
Figure 1: Research Framework

CONCEPT

RESEARCH AIM

ROLE OF THE URBAN

DEFINING THE 24/7 ENVIRONMENT

GUIDELINES

INDICATORS

CONDITIONS

EFFECTS

LITERATURE

SECONDARY DATA ANALYSIS

THEORETICAL MODEL

10+2+1: QUICK SCAN

TYPOLOGIES

DEFINITION

TOOLSET

ACTION

CONCEPT

RESULTS

PRODUCTS
2. Relevancy

2.1. Scientific Relevance
The research takes on qualitative issues such as vitality and quality of life from an angle of spatial planning. Amongst others, the discussion of urban systems, network model of planning and time geography are also considered from the spatial framework. The main relevance is in isolating spatial consequences of something intangible like time and functions intertwined with societal and cultural consequences.

Key concepts: Urban vitality, Night Time economy, Urban Systems, Time expansion

2.1.1. Urban Vitality Today
Jane Jacobs started with the concept of vitality of a city and Landry expanded it to critical mass with all the trappings of modern terms and conditions. Simply put, the life of the city is a worthwhile discussion to enter into, since it might be one of the most intangible factors to condition and manipulate in an urban system. This research will also bridge across the theories of urban systems (Klaasen 2004), urban vitality (Landry 2001) and image branding of a city, which are all worthwhile in this age of campaigning for your global home city.

The discussion of urban vitality was started in 1960s, picking up speed towards the late 1980s with the fear of the decline of the city centre. Throughout the 1990s, there was fierce discussion regarding the cultural regeneration of the cities through promotion of urban vitality. This turned into a general atmosphere of apprehension towards the turn of the century when the first repercussions and data from the implementation of certain of the optimistic strategy formulated in the 90s. Now the tune focuses more on the problems of having a vital city centre. [See Chapter II: Timeline in the field of Urbanism]

2.1.2. Metropolitan character wanted
The Netherlands situation is at the brink of structural change, with the discussion and doubts on the level of political planning and the various reports that state that the urban system is not performing up to scratch. Coupled with the continued trend for time expansion, steady suburbanization of the country and the scale expansion of the spatial structure, where the global forces are just as present as the local administrative forces, the discussion for urban vitality in its most extreme form is geared towards exploring a refocus of the spatial planning practice.

In addition, the distillation of time and space as a manifestation of societal and cultural processes is long overdue in the field of spatial planning; this research aspires to contribute with a tool set useful to the urban planner in understanding these distinctly separate fields of knowledge.
I.3. **Social Relevance**

This research is about what potentials and differentiations a 24/7 environment has in terms of impacting social structure, public security, economy and legislation to name a few.

3.1.1. **Differentiating the urban environment**

In many research and policy documents, the shortcomings of the Netherlands as a functioning metropolitan region is called into question. (See Chapter V: 1.1) The main points of weakness include the lack of metropolitan character [Meijer and Hoppenbrouwer 2002] and urban differentiation. A 24/7 environment is just the defining difference cities in Netherlands can use to create quality of environments that are attractive to the global players which they would like to attract. Granted that a 24/7 city is an extreme version of the concept of urban vitality, but what better way to approach the intangible topic of urban vitality by considering an extreme example.

3.1.2. **Vital cities in the foreground**

"Cities also have their role though they are often misunderstood and not fully appreciated as centers of trade, commerce, creativity and culture. They also symbolise entire traditions, identities, countries and even continents...Good cities all have distinctive identities and characters, even a ‘pulse’ or rhythm of everyday life. Cities stimulate the senses in many more ways than it is possible to plan by adhering to visual order. Cities need an element of chaos, or more precisely an active street life. As part of their culture as urban places indeed the very notion of urbanity cities should also offer an evening and night-time economy." (Montgomery 1995)

As traditional definition of national territorial boundary and administrative bodies are deconstructed more than ever, we see a focus on the importance of the success and value of the city, so distinctly highlighted in the 10th Venice Architecture Biennale, where the city, metropolis takes centre stage in terms of political, social, cultural function. We return to an era envisioned by Jane Jacobs where the diversity and detail of a city is of vital importance to its economic and social health.

Traditionally, the 24/7 environment has been seen as a tool for urban regeneration but was shunned due to the planners being taken aback by the unwanted consequences that it brought along with it. This discussion would then be useful to consider how else and in what other way the benefits can still be reaped for society.

3.1.3. **Effects of 24/7 Living, Working and Playing**

Time expansion is a phenomenon that no one can get away from; this push for extra service hours is also witnessed in the later store opening times and the breakaway from the traditional 5 day 8 hour work week. There is a demand for services available to suit the pressurised worker, the single mother that needs to work at odd hours or do groceries at non conventional hours to manage the daily school schedule of her child. In fact if the city was used as fully as in Dantzig and Saaty’s ideal 24 hour city, unsafe streets, rush hour traffic and bottle-necking will be a thing of the past.
Theoretical and Methodological Framework - A summary of key concepts
The theoretical approach is based on considering 24/7 environments as extensions of urban vitality juxtaposed against a theoretical spine of the concept of time within spatial planning in relation to time expansion and temporal grains.

4.1. Methodological Framework

- Reality as an open complex system
Reality, especially urban reality is an open complex systems made up of parts of many other systems, the identifying elements of “attributes”, “structure” and “environment” are part of the operating features of a complex system such as the urban. Hence, it is crucial to understand that the systems (legal, spatial, societal, economic) do not operate independent to each other, but within a related environment on multiple scales.

- Selective perception
Any attempt to model reality has to face up to the fact that the gesture in itself is always a simplification and it is impossible to replicate totality. Therefore, the research method operates from the standpoint that any data result or tool is a form generalization at best.
Simplification of systems
Contextual separation in the case of this research is highly necessary, given the intangibility of the subject of urban vitality. Certain issues such as the cultural background, geographical location and climate are different from all scales and levels. The differences are acknowledged and cataloged but by far, taken into consideration as separate from the object to be discovered.

Scientific value of theoretical models
Theoretical model as a tool: there is value in considering a strategic approach and theories present to justify and refine a research or design. The theoretical model is a means to an end and since processes are just as important as results, the model is therefore a tool and a process-result.
4.2. Key Concepts

The choice of Jacob and Bianchini and Landry is to give an overview of the popular lines of thought still available on vitality today, while engaging a reactionary view from the 1960s as well as a progressive approach in developing a creative city in the context of present times. Landry and Jacob make a good match as both were active advocates of a vital street life, except on different scales. Bianchini and Landry advise authorities and governments while Jacob wrote about short street blocks and ‘eyes on the street’ concept which offer a contrast in scale and detail level.

The contemplation of time factor within spatial planning and identifies the main lines of thought within the framework of urbanism of networks, in approaching the city, the region or reality as an environment of urban systems (Klaasen 2004).

Figure 4: Conceptual Model

Key Concepts 1: Urban Vitality

Urban Vitality is the life force of the city, shaped by its pre-existing conditions (spatial or otherwise), requiring a critical mass to become viable and strong.

Statements:
- Urban Vitality becomes a new competitive frontier for cities as they compete on a global scale.
- Urban Vitality is a phenomenon where the sum of potentialities is greater than their individual parts.
- Urban vitality feeds upon the viability of the potentials.
- The measure of vitality is a balance between analyzing quantitative data and applying qualitative consideration to them as shown by Landry. Hence, the methodology can be consistent, but the detail defers per location and hence the need to create common ground, such as cultural basis, functional relations and geographical proximity.

Indicators

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1 For further elaboration, please refer to Appendix B: Theoretical Framework
For relation of key concepts to the understanding of 24/7 environments, see Chapter II.
Landry and Bianchini also includes a set of indicators, or “indices of viability and vitality” which they use as judgment on the health of a city and cover the fields of economics, social, environmental and cultural systems. The list of indicators are inexhaustible but the item of value is that Landry and Bianchini recognize that each city, can generate a specific set of indicators and although most indicators are similar along the main topics of “measuring” or for a better word indicating, given the intangible nature of elements of creativity and vitality. They usually cover the bases of demography, diversity, density, accessibility, security, identity, innovativeness, linkage and synergy, competitiveness and organizational capacity, which are extensions of the criteria that are important to Landry and Bianchini’s definition of urban vitality, but specified to take an adequate reading of a city. The concept of interest is that using quantitative data, the indicators are then expressed in qualified descriptions.

For example, if the data states, there are XXX street lighting on the street, then the qualifier will be, how safe do people feel on the street with XXX street lights?

Key Concepts 2: Time in Urbanism - Pattern and Process
In Klaasen’s exploration of time in spatial planning, she holds the urban system to 2 approaches, mainly that of pattern and process. This is crucial in understanding time usage within a city fabric, and touches upon the concepts of temporal grain which Klaasen also addresses. A 24/7 city is not a constantly functioning environment of systems, but systems that function in rhythms, related yet separate to one another, forming a mesh of processes across the fabric which intensifies the usage of a space.

Key Concept 3: Time in Urbanism – Urban Stress
The concept of urban stress as related by Ascher (1997:119), points at the multiple objectives of the urban user constrained by “psychological, social and cultural, contextual conditions or events” who therefore require more mobility and multifunctional spaces to adapt. The urban system is also under stress with the increased amount of demands for services and activities by the user groups due to their extended work time. The 24/7 environment is the saturation point of the stress, whereby it culminates to justify such an environment where the pressures of the urban system can be smoothed out over time.

Key Concepts 4: Understanding Urban System
Urban systems: Klaasen (2005 : 21 ff.) classifies urban systems as not only cities and urbanized regions but also parts of cities,...entities of socio-cultural, spatial-ecological, economical-technical and administrative-organizational elements.

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2 “A process is said to exist in the case of a prolonged, regular action or succession of actions that take place or are carried out in a certain manner Processes may be divided into cyclical and linear processes and cyclical processes may themselves have a linear component” (Klaasen 2004:14).
relations and processes and add that urban systems are extremely complicated open systems (Doxiadis 1968:189; Peursen 1986:57). An important difference is taking in the consideration of time as an added dimension and thereby creating a fuller view of reality as a system by approaching urban context as a 3 dimensional object rather than just a sum of separated layers.

The following tables highlight the models which are applicable to my research

**Process Oriented Design vs. Pattern Oriented Design**

The principles of process oriented designs will be reflected in the analytical instruments produced. This orientation means that the questions asked are more biased towards finding, judging and inventorying the process rather than the pattern, although, the pattern is first acknowledged and then enriched by considering the processes with priority.

**Process oriented as ‘small-grained cyclic urban-societal processes with a spatial dimension’** - (Klaasen 2004:200)

*Figure 4:vi Process Oriented Design vs Pattern Oriented Design*

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<td>Pattern</td>
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<td>Living, Working (residing)</td>
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<td>Places</td>
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<td>Pattern-based - blueprint planning</td>
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Fig D from Klaasen (2004:201)
CHAPTER II: WHAT IS THE 24/7 ENVIRONMENT?

1. Understanding the 24/7 environments

1.1. Related Concepts

The following concepts are the crucial framework in formulating the definition of a 24/7 environment based on confronting theoretical underpinnings with real cases of cities with acknowledged 24/7 environments.

Urban Vitality

As discussed in Appendix B (Theoretical Framework), **Urban Vitality** is the life force of the city, shaped by its pre-existing conditions (spatial or otherwise), requiring a critical mass to become viable and strong. 24/7 environment is approached as an extreme phenomenon of urban vitality to be able to conceptualize an environment complicated by time and processes.

24/7 Translation: A measure of 24/7 environment other than activity throughout time spans is the contribution of those activities to the vitality of its surroundings.

Activity and transactions

According to Bianchini and Landry (1991), urban vitality is concerned with levels of activities (things going on), levels of use (participation), levels of interaction, communication, transaction and exchange, levels of representation (activity, use and interaction is projected outwards and discussed in the outside world) (Landry & Bianchini 1994 :22)).

24/7 Translation: A 24/7 environment is identified by the amount of activity and usage throughout the day. It is spatially not possible to capture exchanges and transaction, but possible to identify locations and services which are associated with the daily exchanges and transactions of the urban users and the time spans which they are accessible. Therefore the daily urban services are isolated as part of the definition of the 24/7 environment.

Diversity and public space

Jacobs (1961) discusses the issue of a vital urban environment by advocating a diversity of mix use and “good” public spaces that everyone can and be able to use regardless of time of day. On successful city streets, people must appear at different times. This is time considered on a
small scale, at different times throughout the day. (Jacobs, 1961, p. 152)

24/7 Translation: A healthy urban environment is used by all spectrums of society throughout the myriad of time spans. A 24/7 environment is not a constant singular activity, time span or society sector but an overlapping of every user groups routine and pattern of usage. It can also be defined as a public space (indoors/outdoors – as long as accessible by the general public) which provides services at any time span. In short, it is a time-democratic environment, where any user should be able to conduct the same diversity of activities they are accustomed to in usual working hours/time spans.

The key to successful city places is therefore diversity, supported by relatively high numbers of people with different tastes and proclivities. [Montgomery 1995]

Urban Systems

Klaasen (2004: 11 ff.) classifies urban systems as not only cities and urbanized regions but also parts of cities, entities of socio-cultural, spatial-ecological, economical-technical and administrative-organizational elements, relations and processes and add that urban systems are extremely complicated open systems (Doxiadis 1968:189; Peursen 1986:57)

24/7 Translation: 24/7 environment is not defined by a constant drone of a single activity or urban system. That is just continuation of 1 rhythm and impossible for the average human biorhythm. It is the overlapping of several rhythms and systems which is identified by the intensity and diversity of different functions and services. The identifying functions and services encompass the various systems of the urban fabric, basic functions, emergency, residential, commercial, recreational, cultural, retail, tourist-oriented and institutional to show the different spatial territories that these functions each claim. The point of interest is then in areas where they overlap often and feed of each other (See Symbiosis and Agglomeration).

Symbiosis and Generators

Symbiosis is a mutuality advantage that occurs in economic, socio-cultural activities (Klaasen 2004: 135), whereby there is a host activity or system that is attracting complimentary activities to support it and usually relegated to pedestrian/cyclist action radii due to spontaneity of the activities involved. In other words, a user does not drive to a theatre or concert location to take part in the food and beverages opportunities that support the theatre or concert location. The motive is to visit the theatre location with a purpose and the partaking of surrounding opportunities is part of the symbiotic effect of that theatre urban system.
24/7 Translation: In the Quick Scans done on the various cities there are constant repetitions of attraction and eventual clustering of activities around selected functions or generators which due to the mass they attract or the scale of their operation encourages symbiosis in their surroundings. [See clustering of leisure, food and beverages services around major infrastructural hubs (Hauptbahnhof, Berlin), city campuses and student related leisure activities and services (all hours laundry, supermarkets, cafes) (Studiestræde, Copenhagen or College St, Toronto)]. This effect happens usually on a smaller urban/local scale (1-3km action radius) dependent on the prevalent lower level mode of transfer of the users. For example, the Studiestræde is directly connected to the University of Copenhagen campus and within 1.5km radius of the campus. There is a cluster of student oriented night time activities and clubs which cater to the campus crowd.

Agglomeration and Clusters

Agglomeration occurs when a certain function or services enters the urban environment and generates a beneficial effect on the surrounding activities. (Klaasen 2004: 135), this exponential growth of scale and attraction of services can occur at any scale level.

24/7 Translation: The clustering of leisure, retail and tourist oriented services in the various cities is a testament to the agglomeration effect of the 24/7 environment. In the Soho area of London, there is a high clustering of leisure, night time economy around each other, and they attract as well, food and beverage services and retail. Up to a certain scale, an agglomeration of services can serve also as a generator of attraction and support symbiosis with other supporting functions.
Urban Rhythms

In “Du vivre en juste á temps au chrono-urbanisme1” (Ascher 1997), Ascher gave a clear breakdown of the formation of time expansion and time in urbanism of cities. Ascher talks also about the dichotomy of hours extension – longer working hours require longer services which requires longer cycles of work while public wish to have less, relating to economic expansion and insatiable demands of the post-industrial society.

24/7 translation: Urban time spans are now dependent on the service hours and opening times more than that of the church or agricultural production time. The 3 time spans of concern are the normal working hours, which most environments will fulfil, therefore the key to examining the 24/7 environment is in looking at the extended and unusual time periods and chart the urban vitality thus.

Service Paradox

Increase of services required in general as seen in the territorial increase in the EU countries and the lack of uniformity in provision hours, leads to increase in work time, shifts and demand on the individual’s time management. [Lehndorff2, 2001:1]

Differentiating Time Spans and functions

(See Appendix D for timetable)

A 24/7 city is not a city with constant dizzying activities, but rather a city built up from activities of different time spans that occur within the same spatial structure. Since most city typologies chosen are assumed to have more than the basic service industry, given their GaWC rating, the focus would be to look more specifically for after hours or 24 hours economy and activities.

Necessary functions vs. demanded functions

All after-hours functions can be defined into 2 categories, necessary and demanded functions.

Necessary functions exist in all major cities due to their inevitable demand in modern society, be they organized by the authorities or born out of sheer need by the residents. Care facilities, law enforcement, emergency services can contribute to the pattern of 24/7 environment, but only by their spill out of potential consumers.

Demanded functions are categorized as functions and services borne out of the leisure economy, tourist trade and personal services. Their sole commonality is that the city will continue to survive without them, but their demand is fuelled by the inhabitants’ wants and desires.

2 Steffen Lehndorff is an economist and Director of the Working Time and Work Organisation Research Unit at the Institute of Work and Technology (Institut Arbeit und Technik, IAT), Gelsenkirchen / Germany. His major research interests include international comparative studies of employment and working-time structures and regulation and of working time, work organisation and industrial relations in services and manufacturing.
Therefore, the activities with time spans after general working hours are that which will be especially focused on.

<table>
<thead>
<tr>
<th>Functions</th>
<th>Necessary</th>
<th>Demanded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Emergency Services (Police, Fire, Medical Aid)</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Civil Emergency Services (Public Utility, Infrastructural Services)</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Basic Services (Train stations, airports, gas stations, accommodations, production facilities, healthcare)</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Support Services (Financial, business services, telecommunication, security, management)</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Consumer Services (Retail, hotels, food &amp; beverage establishment, leisure and recreational services, events, personal care services)</td>
<td>•</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time Spans</th>
<th>Working/Opening Hours</th>
<th>Examples</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Conventional</td>
<td>09:00 - 17:00 (Monday - Friday)</td>
<td>Most offices (financial services, public administration etc), conventional small scale retailers</td>
<td>Normal working hours, excluding holidays and weekends</td>
</tr>
<tr>
<td>II Extended</td>
<td>09:00 – 22:00 (Monday - Friday, Weekends, Public Holidays)</td>
<td>Services (F&amp;B establishments, major retailers, some public facilities), some sectors (creative, production, healthcare).</td>
<td>Normal working hours extending with opening during selected holidays and weekends.</td>
</tr>
<tr>
<td>III Extended Plus</td>
<td>08:00 – 02:00 (Monday - Friday, Weekends, Public Holidays)</td>
<td>Usually services in the leisure economy zones (F&amp;B, hotels, entertainment venues), business services catering to international markets.</td>
<td>Specific (after works hours), shift works and closed on certain days a week (Usually a weekday)</td>
</tr>
<tr>
<td>III Unusual</td>
<td>12:00 – 06:00 (Monday - Friday, Weekends, Public Holidays)</td>
<td>Late night establishment, for leisure purposes, vice trade, emergency services, public utilities, round the clock production facilities, transportation sectors.</td>
<td>Usually after normal working hours, odd hours period of 2-6 am, sometimes only in the weekends.</td>
</tr>
</tbody>
</table>
1.2. Definition

Based on the following defining concepts, the 24/7 environment is broadly defined as follows: (See Chapter III for more details on indicators)

24/7 environments exist where there is possibility for multiple temporal rhythms, functions and activities to co-exists within a finite space.

The 24/7 city is then an urban fabric where these environments are present within the multitude of different layers and characters of a successful urban environment.

II]2. The 24 hour city as a concept:

A note of interest is perhaps that in the course of research, most of the academic and policy documents that actively discusses the concept of 24 hour city mainly stems from the United Kingdom. This could be due to the consistent involvement of the planning framework in this subject. A reflection of this is also seen in the time line of planning policy of the United Kingdom, comparatively, the Netherlands is still in the infancy stages of this concept.

(Refer to
Figure 2: Timeline in the field of urbanism

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>Jane Jacobs’s observation on lively streets inspires many to come.</td>
</tr>
<tr>
<td>1980</td>
<td>Concerns for the city centre and urbanity.</td>
</tr>
<tr>
<td>1991</td>
<td>COMEDIA expose the deprivation of town centres as dangerous, while discovering expansion in work time patterns. Publishes Out of Hours report</td>
</tr>
<tr>
<td>1993</td>
<td>1st National Conference on the Night-time Economy held by Manchester Institute of Popular Culture in Manchester. (The term 24 hour city was coined, together with an optimism of the 24 hour city as a regeneration magic bullet.) Civic Trust publishes Liveable Town and Cities</td>
</tr>
<tr>
<td>1995</td>
<td>Manchester adopts the 24 hour city planning strategy. Night Culture and Night Economies (Bianchini) Cities and the Night Time Economy (Lovatt)</td>
</tr>
<tr>
<td>1997</td>
<td>City of Sheffield held “The 4th National Planning Conference on the 24 hour city” discussing continental references, climate conditions, management and governance. 3 types of 24 hour city concept: gap economy after work and before pub, night time/evening economy, full 24 hour city. (Heath &amp; Stickland 1997)</td>
</tr>
<tr>
<td>1999</td>
<td>‘24 Hour City Conference’ London Concepts of mixed use, high density living becomes mainstream in the profession (Urban Task Force)</td>
</tr>
<tr>
<td>2000</td>
<td>Worrying voices form from residents given anti social behaviour. Trend of urban hedonistic centres catering only alcohol and vice to the young.</td>
</tr>
<tr>
<td>2001</td>
<td>National Conference on Licensing Reform held at University of Westminster</td>
</tr>
<tr>
<td>2003</td>
<td>Late night licensing, transfer control of operating hours into discretion of the boroughs/wards.</td>
</tr>
<tr>
<td>2004</td>
<td>Alcohol and the Night Time Economy (GLA)</td>
</tr>
<tr>
<td>2005</td>
<td>Roberts and Turner writes on the “conflict of liveability” in London’s Soho.</td>
</tr>
</tbody>
</table>
II]3. The 24 hour city

A city is never an individual isolated system. It is a network of complex systems and thus the processes must be tracked in relation to each other. The services and functions are never solitary and are usually in symbiotic or agglomeration effect with each other. Based on the Quick Scan (Appendix E) a few individual types of city which houses 24/7 environment are more or less belonging to one type at certain areas than in the others. This overlapping of urban fabric is a key success to the 24/7 environments as they feed one another.

3.1. Leisure & Vice City

Described as the urban playscape for the post-modern city centre (Chatterton and Holland, 2002), the leisure & vice city caters to the modern day hedonist in all who are attracted to the city. The area between Soho, Leicester Square and Covent Garden in London are the best examples of a hedonistic playground. 85% of the services there are catering to the enjoyment of earthly pleasures, from eating, drinking, to watching performances, theatre to the vice trade, as long as you are willing to pay for it, it can be found within the 2km street block. This is the “Leisure & Vice” city of London and part of the issues that is now being researched by Roberts and Turner is precisely the over indulgence of Westminster into leisure and vice based functions. (See Lessons from London) The leisure and vice city is run by the mostly young hedonist whose single purpose is to fulfil their social indulgence.

3.2. Trade & Service City

Frankfurt am Main is known as “Mainhattan”of Europe due to the high intensity of global finance and trade that goes on within the city. The business district within the Aldstadt is connected via Taunusstrade to the Hauptbahnhof and that street is known for its 24/7 activity for the commuters to and from the main station for food, retail, leisure and of course vice. The trade and services of the city also supports the daily urban needs of their residents and commuters. These trends of certain commercial professions in banking, law and financial trade (See Appendix F) which
require off hours shift work and often contribute to the activity and user base in the
downtown business areas. The trade and services city is fuelled by the professional
working late hours trading with another continent, the employee in the service industry
that is working shifts to provide services to the other working crowds. This activity of
relationship of the user who becomes from commuter to resident contributes to the
level of participation within the city.

3.3. **Tourist City**

Most of the cities compared benefit from the tourist dollar greatly; Amsterdam itself takes in
€4.5 billion per year from the tourism industry. It is no wonder that areas of European cities
have special opening times and activities geared towards the visitors. These are the
users that are already on leisure oriented spending warpath and the clustering of tourist
activities and services around night life and 24/7 environments are a testament to their
spending power. Although the tourist mass contributes to the city at specific seasons and
time, the main generator of activity for 24/7 environments are still the residents and
commuter who utilise and transact over the city space daily.
3.4. Users Types

A simple profile of the type of users who provide activity and vitality to the urban spaces within the city helps in understanding their respective needs, purposes and behaviour in relation to the spatial environment.

The Hedonist

“The ritual descent of young adults into city centre bars, pubs and clubs especially during the weekend” (Chatterton and Holland, 2002: 95)

Young, upwardly mobile urbanites bent on night entertainment and consumption actively contribute to the night time economy more than the general population (Mintel, 2000). The hedonist is a product of a mix of youth lifestyles and cultures.

[Yuppies, MVVD, Yob, Townies, Trendies, Students, 24 hour party people.]

See Appendix F: 1.3 for reports of user behaviours.

Age group: legal age – early 40s
Social Status: Affluent, student/office worker employed.
Active periods: Nights, Weekends, specific week nights
Aims: Get drunk, socialize, network, “to pull”, and belong
Activities and locations: Night clubs, dance halls, cafes, late night restaurant, entertainment (casinos, films etc), daily services operating after hours (students, especially)

Spatial Consequences:

• Needs wider, more structured public spaces and frequency of transport (night).
  o Public transport and space overcrowding during the closing hours of some establishment or changing from one location to another.

• Noise reduction, placement of public toilets and waste depository.
  o Violence and drunken behaviour a nuisance to other user groups/residents, compounded by pollution to the public spaces in terms of personal waste, glass bottles and food packaging.
The Urban Tourist

See Appendix F: 1.3 for reports of user behaviours

Age group: all ages
Social Status: All sorts: budget traveller to affluent.
Active periods: Extended hours, seasonal periods (tourist high/low seasons)
Aims: Recreation, Entertainment, F&B, Cultural and Tourist Attractions.
Activities and locations: F&B, Recreational locations, public areas, small retail locations

Spatial Consequences:
- Accessibility of public transport
  - Pedestrian zones are usually part of the tourist city, where the retail and entertainment transactions are free to take place without fear of traffic interference.
  - Orientation within the city is also crucial as during the unusual hours, navigation might not be so easy as during the daylight hours
- Noise reduction, placement of public toilets and waste depository.
  - Violence and drunken behaviour a nuisance to other user groups/residents, compounded by pollution to the public spaces in terms of personal waste, glass bottles and food packaging.
The Resident

Based on finding of the profile of night time shoppers in the United Kingdom, it was surmised that activity peaks during late evenings and early mornings, mainly fueled by shoppers who are “in employment and engaged in shift working” and they are usually below 50 years of age. They can be further qualified into 2 types, weekly and essential shoppers. (Richbell and Kite, 2007)

See Appendix F: 1.3 for reports of user behaviours

Age group: All ages
Social Status: employed service economy workers, extended hours professionals
Active periods: Week nights, early mornings (to and from work, to and from home.)
Aims: Destination oriented (home/work), with basic daily services not accomplished during normal hours due to clash with working time, errands (groceries) or meals along the way.
Activities and locations: Eateries (In Asia mostly, where going out after midnight for supper is a social activity in itself), Night supermarket, convenience stores, transport hubs, pubs

Spatial Consequences:

- Needs frequent transport, clean and safe streets
  - To ease the travel to and from residence to work and maintain surveillance on their property from the party crowd.
- Choice in retail location around either residence or place of employment
  - Increased variety in locations and activities will increase the role the resident traffic plays on the environment.
CHAPTER IIA: LESSONS FROM LONDON

1. Lessons from London: The Good, the Bad and the Ugly 24 Hour City
The value of studying London is that there has been a consistent effort in exploring, managing and re-evaluating London as a 24 hour city with a booming night time and leisure economy. Since there is no ready formula that describes or qualifies a 24/7 environment, the best way would be to learn from existing examples about what conditions, potentials and issues make a 24/7 environment.

Affluent and Enormous London
London, one of the most important urban centers since the 19th century, has continued to retain its foothold in Europe, as one of the largest economic drivers of the region. A population of 7.4 million coupled with 700,000 daily commuters, and a external visitor population of 12 million (domestic), 15 million (overseas) and 21 million from the surrounding areas gives it the clout for a vibrant and active leisure and especially night time economy. (Source: ONS¹)

Young and exciting London
With a median age of 34 years of age, London has 62% of population aged 40 and below (Great London Demographic Review 2005). The youthfulness of the society is reflected in the wealth of sub cultures and the availability socially to practice and indulge in new activities and experiences. With 32% of residents being of a different ethnicity, London is diverse and young enough to experiment with new urban temporal concepts.

All in all, London uses a multi-disciplinarily and multi-dimensional collaborative offensive front to deal with the occurring issues.
The 3 key solutions that are reiterated are integration of all stakeholders, pro-active and flexible approach from the authorities and good design.

1.1. The Good & the Bad in Managing the Night Time Economy

In London 4 types of night time activities can be observed:
Leisure: West End (Soho), Leicester Square as entertainment hubs
Clusters: Shoreditch, Islington, and South Bank (Clubbing, dining and cultural activities)
Specialist Town Centers: mostly entertainment based, also used as regeneration schemes.
Leftovers: Remnants from land use planning, segregated, car-based locations.

1.1.1. The Good

The abundance of leisure facilities does wonders for the image of London as a world city and its tourism. Indirectly, this contributes to the vibrancy and commercial value of London, towards business visitors. Not to mention that the leisure economy is one of the major employers and contributor to the GDP of London.

1.1.2. The Bad

The typical anti-social behavior associated with the night time economy compounded by the large scale of locations form the basis of most of the complaints. The 3 main headliners of unwanted side effects are excessive drinking, crime and drug use and environmental pollution. (For more details, refer to the Best Practice Guide)

Therefore striving for a good balance, is critical, given that you cannot avoid or embrace 24/7 environments without undue consequences.

Policy and Legal Framework

On a national level, there is agreement for proactive action to prevent future problems while multi-functional economies are encouraged, using planning system, licensing laws and transport plans as tools.

The Greater London Authority’s London Plan acknowledges support for the Night time Economy, using policies such as the Entertainment Management Zone, based upon co-operation of public and private operators. The mayor’s directive is to take an offensive against nuisances of this economy with “Polluter’s pay” policies. This takes forms in the following policies:

- London Cultural Capital
- Ambient Noise Strategy
- Transport Strategy
- Economic Development Strategy
- London Anti-Social Behavior Strategy
- London Agenda for Action on Alcohol

In addition, the following legislation are implemented to support the scheme:

- Planning and Compulsory Purchase Act 2004
- Licensing Act 2003 (Section 182 in particular)
- Crime and Disorder Act 1998
- Criminal Justice and Police Act 2001
- Safer Clubbing Guide
- Safe and Sound Guidance
- Anti-Social Behavior Act 2003
- Violent Crime Reduction Bill 2005
The second section learns from Roberts and Turner’s (2005) article that maps and dissects 48 hours of life in Soho as a response to the 24 hour city and its accompanying problems. This more detailed look from a non-administrative point of view is also interesting to consider.

1.1.3. The Ugly: 48 hours in Soho

In Marion Robert’s Conflict of Livability (2005) the issue of the 24 hour city is taken up from the perspective of the daily users or at least local level.

Figure 1: CCTV Footage from Roberts, M (2005) on London’s West End/Soho

Tracking via video

Rather than base her study on data available, Roberts chose to use live video surveillance on one micro area to examine the issues that the Soho residents were aggravated by. High pedestrian densities are attributed to the 2700 licensed establishments in the area. This creates a mass of drunk and disorderly users at any time in the night, compounded by a problem of mass exodus at a certain period of the night, and the issue of night transport being limited to 24 hour buses after 2 am.

Urban Renaissance?

Soho’s danger is that its anti-social users will overwhelmed those who use it in other time periods, disturbed by the noise levels, crowds, transportation issues of taxis and minicabs to the areas. The issue is not a 24 hour bar or a 24 hour vice trade, but to accommodate all levels of society with 24 hour or extended hour functions. Ken Worpole, suggests the 24 hour library, study centre, railway and bus station and mentions Barcelona and Copenhagen as responsible examples with premises sticking to the regulations by removing furniture after an appointed time.

Robert and Turner’s Study show a micro slice of the reality that makes up a 24/7 environment, but the lesson to be learned is that the 24/7 environment as it is understood now by many, is not a healthy or sustainable approach to maintain. In fact, the Soho drinking environment can hardly be considered 24/7 due to the establishments catering to night time activity mostly or having bulk of activity generated during a certain time span. A 24/7 environment is more than a leisure/vice biased environment and must over compensate to try and include the existing fabric, residents and functions of all ages, time and inclination.

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2 Marion Roberts and Chris Turner, ‘Conflicts of Liveability in the 24-hour City: Learning from 48 Hours in the Life of London’s Soho’, Journal of Urban Design, 10:2, 171 - 193
CHAPTER IIB: ANALYZING THE 24/7 ENVIRONMENT

[IIB] 1. **10+2+1 Cities**

To identify the conditions and patterns that makes a city or environments 24/7, a common set of criteria were used to isolate a set of cities which then can be compared for their functions and 24/7 environment.

The following criteria were used as an initial selection.

- **GaWC Ranking**
  The GaWC Ranking is an indication of the service economy level of the city. A 24/7 environment occurs in many conditions, but mostly circulate around the amount if services available to the users at different times of the day. Therefore, a comparable level of advanced produced services is the first distinguishing criteria.

- **Population Density**
  The density of services is related to the determination of the critical mass of users required for a 24/7 environment to function. This is a simplistic way of being able to make comparison between cities and environments of different geography and orientation.

- **GDP per capita**
  Affluence of an urban area contributes to the amount of time and expenditure budget available to the users of the environment.

The initial selections make a set of 102 cities (at least 1 per continent), of which some are similar in terms of density, some in terms of population size, affluence or ranking to get a selection across the board.

Out of these cities, 2 cities are especially taken into consideration for further study.

**London**: For its advanced effort in understanding and studying the spatial consequence of the 24 hour economy and its abundance of 24/7 environments, well known and identifiable to make further comparison.

**Copenhagen**: For being the most similar in terms of density, urban area, population, services ranking, geography and cultural backgrounds to Amsterdam, Netherlands. [See Table 1: Choosing 10+2+1 Cities]
<table>
<thead>
<tr>
<th>Rank</th>
<th>Region</th>
<th>Urban Area</th>
<th>Country</th>
<th>GaWC</th>
<th>Political/Ad</th>
<th>Socio-Cultural</th>
<th>Financial</th>
<th>GDP/Capita (000): $US</th>
<th>Year</th>
<th>Density (inhabitants/km²)</th>
<th>Area (km²)</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Asia</td>
<td>Singapore</td>
<td>Singapore</td>
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<td>+</td>
<td>+</td>
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Sources
Demographia: Wendell Cox Consultancy (International Public Policy, Demographics, Economics & Transport)
1. OECD Competitive Cities in the Global Economy.
2. United States: Scaled based upon OECD reported U.S. GDP per capita
4. London: Scaled based upon OECD reported London GDP per capita, adding GDP per capita of historic counties bordering on GLA.
### Table 2: Variation in 24/7 Environments

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LONDON, GREATER LONDON, UNITED KINGDOM

STATISTICS:
Area: 1623 km²
Density: 5100 inhabitants/km²
Daily change in density: ~1.0%

London’s leisure economy employs over 290,000 employees and generates upwards of £9 billion annually and 20% of that sector is concentrated within the West End ward in Westminster. (Source: GLA Economics 2003)
By 2001, the leisure economy has grown by 29% and provide 7% of employment for the entire country.
Counts of Services:
Retail (Goods)
181 Shopping Centres
582 Department Stores
67,076 Retail Locations
2160 Convenience Stores

Counts of Services:
Institution
342 Hospitals
86 Pharmacies/ Clinics
384 Universities, Higher Education

Retail (Consumption)
10,103 Restaurants (no hotel)
1,810 (Restaurants within hotel)
4,240 (Snackbars, Cafes, Eateries)

Recreational
378 Theatres/Concert Locations
141 Cinemas
158 Museums
562 Night based entertainment
The densest zone of 24/7 activity falls directly over the well-known stress area of Westminster Borough and the wards of Mayfair, St James, Soho, Covent Garden, Camden and Islington.

The potential zones include Romford, Croydon and parts of Lewisham, which have all been named as potential metropolitan centres according to the GLA: London’s Night Time Economy Assessment of potential zones. London’s 8.3 million inhabitants are capable to support a 24/7 zone of about 10km in diameter.
Clustering of programs and functions within Inner Ring of London.

The location of the services and their intensity is also due to the fabric of the city, the closeness of the grain size within the historical city itself allows for a tightly packed and densely utilized programmes within a street block. The smallest grain size found in the old city area ranges from 50 - 300m.
Density of 24/7 Environments and Surroundings

In the case of London, the boroughs of Westminster and Camden are known for their 24/7 activity, services and locations. These boroughs are of an average density of 7,500 - 10,000 inhabitants/km², while they are surrounded by much highly dense boroughs on all sides, in the case of Kensington and Chelsea, close to 20,000 inhabitants/km², which adds to the user base and catchment areas of the 24/7 environment. This average residential density is also an indication of the mix of activities within the zones. This allows for more commercial and services locations to be present within the zones.

[Source : Neighborhood Statistics: www.stats.gov.uk]
Wardour Street is a local level road linking Shaftesbury Ave and Oxford Circus, one of the busiest retail street and leisure streets around. The quadrant formed by Oxford, Shaftesbury, Regent Street and Tottenham Cross Road is known as the Soho/West End Ward, where most of London’s Nightlife occurs.

Wardour Street also cuts through the pedestrian area of Gerrard Street which is the Chinatown of London, famous for late night Chinese eateries that cater to the clubbers and hedonists who frequent the night clubs in great abundance around Wardour.

The area between Oxford, Shaftesbury, Regent and Charing Cross is very intimate in grain size (50-100m) per street block, with plenty of pedestrian only streets and public spaces.
Bordering around the Leicester Square hotspot, Wardour St is in itself also a big attractor due to the clustering of 24/7 activities and services that can be found along it. The pedestrian enclave of Kingly right next to the busy thoroughfare of Regent is one of the densest concentration of not just night clubs but architectural and design firms. An ideal mix of night and day activities. The structure of this enclave is typical of a grid model where the busy thoroughfare shields off a highly pedestrianized area where most of the activities take place.
Park lane and Barclay are 2 regional roads that cut through the East Croydon Area. The area is a possible 24/7 zone with the amount of generators it possesses. Between Fell Road and Park Lane is a high density build up of commercial and institutional services, including the local borough council. Adjacent to that block is the Croydon college, a huge campus which provides possible critical mass for this area.

The Whitgift Shopping Centre on George Street is a regional centre and carries all retail and some leisure services after hours as well. Not to mention, that between Mint and Katherine is one of the busier bus terminals this side of Central London. Surrey street also spots a cluster of night clubs next along High street.

The area around Croydon station and the Whitgift Shopping centre has a medium sized grain (100-500m) per street block, with limited pedestrian and public spaces.
Urban Vitality: Exploring spatial conditions of 24/7 environments for Netherlands.
The potential of this site lies in the availability of critical mass, Croydon is connected to London via the tube, bus and train and has its own tramlink system which increases the accessibility of the location for its users. However, the area of Surrey Street, High Street has already garnered a reputation as a ‘get-drunk’ spot within Croydon and this could be further remedied with the help of balancing this potential 24/7 zone with other user bases and activity groups. The shopping mall could of course be a major generator if it extended its working hours.
Dayton Green is a traditional suburb residential area, where there is not much functions other than residential and of course the basic daily services that come with a suburban residential area. There are a few places of worship, a large sports/green location, surrounded by 2 school, less than 5 retail locations and 1 night bounded activity, a pub.

This location is out of the potential zones as predicted by the 24/7 environment heat map and is a typical example of a non 24/7 area, even though it is supported by 2 major infrastructures routes of the suburban train and the regional access roads of Umbrage and Broadway.
CHAPTER IIB: 3 July 2007
Analyzing the 24/7 Environment

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CHAPTER II: 3 July 2007
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This site experiences pretty much the same daily rhythm of residents and commuters, who would have already done their after hour groceries before coming to the suburbs where nothing is open after 10 besides the newspaper kiosk. This is ideal for residents who chose to live just 6km from central London and yet able to enjoy the peace and quiet not found in London so typically. Despite the abundance of public space and green, this site is not a 24/7 environment.
With a median age of 32 years, Copenhagen is a relatively young city that ranks as a Gamma city on the GaWC rankings, just like Amsterdam.
Counts of Services:

Retail (Goods)
- 21 Shopping Centres
- 671 Department Stores
- 5493 Retail Locations
- 748 Convenience Stores

Retail (Consumption)
- 3493 Restaurants (no hotel)
- 4143 (Restaurants within hotel)
- 332 (Snackbars, Cafes, Eateries)

Counts of Services:

Institution
- 149 Hospitals
- 81 Pharmacies/ Climcis
- 7 Universities, Higher Education

Recreational
- 92 Theatres/Concert Locations
- 76 Cinemas
- 84 Museums
- 147 Night based entertainment
24/7 Active and Potential Zones Based Upon Services Density

The active zone of 24/7 activity falls over a maximum distance of 6km, but the concentration of intensity of 24/7 services and activities are far less than that of London. The potential zone is likewise much smaller and spread over more urban centres. The spread of the potential zone is physically connected to the potential ring perhaps due to the finger plan structure of Copenhagen, where the city is allowed to spread in different lobes, much like the plan for Amsterdam City. Nearly 1.6 million inhabitants are mostly active in the Indre By area for their leisure and recreational needs. [Source: Kobenhavn Kommune www.kk.dk]
Clustering of services and functions within the Copenhagen City limits.

Most of the services and functions are located around the old city centre of Indre By, spreading north-east upwards towards Frederiksberg, Norrebro and towards Vesterbro as well.

The density of functions is again a question from the small grain size of the historic inner city and the Strøget is clearly visible with the location of leisure recreational services.

The smallest grain cell size is around 50 - 200m. This allows for a stapling of functions in a city that like Amsterdam is also heavily dependent on bicycle traffic.
Density of 24/7 Environments and Surroundings

In the case of Copenhagen, the districts of Indre By, Vesterbro and Norrebro are known for their 24/7 activity, services and locations, with an average density of around 5000 inhabitants/km², it is surrounded on the eastern side by the independent commune of Frederiksberg (10,000 inh/km²), the high residential density area of Ydre and Indre Norrebro (close to 20,000 inhabitants/km² each) and the slightly more residential Vesterbro at just under 10,000 inh/km², Valby however is a totally low density residential area just after Vesterbro is the perfect antithesis of a 24/7 environment, despite being so near the active zone. [Source Kobenhavn Kommune www.kk.dk]
Kongens Nytorv is a typical public square at the end of a pedestrian boulevard, the Stroget, which draws most of the leisure and touristic trade within the city. However, on the other side of the busy retail passage, is the 24/7 hotspot of Nyhavn, which is home to many 24/7 restaurants, clubs and activities. The entire space beside the quay is invaded by the throngs of leisure users. Directly from Nyhavn, you are led into Gøthersgade, which is home to THE biggest nightclub complex this side of the Vesterbro. It is a multi-level night leisure complex that offers services from 6 am till 6 am in terms of leisure, food and beverages and even personal services. The Kongens Nytorv then branches out into the quieter enclave near Amalienborg, another touristic attraction and that area is popular with the creative class.
Urban Vitality: Exploring spatial conditions of 24/7 environments for Netherlands.

RESIDENTIAL DENSITY

RETAIL (GOODS) SERVICES/LOCATIONS

INSTITUTIONAL SERVICES/LOCATIONS

COMMERCIAL SERVICES/LOCATIONS

24/7
YES

KONGENS NYTORV
NYHAVN
INDRE BY

CHAPTER IIB:
Analyzing the 24/7 Environment

KONGENS NYTORV
NYHAVN
INDRE BY

CHAPTER IIIB:
Analyzing the 24/7 Environment
Nyhavn is a surprising part of the old city, slightly apart, yet a piece of the leisure and recreational trade from the Stroget. Behind the Nyhavn, creative professionals, embassies and design firms find themselves at home, between small hotels, the Amalienborg and the busy fast pace Gøthalsgade. This site describes a very diverse mix of users, from hedonists, to the students who to the Gard, to the tourists and residents who live just behind the busy junction of Bredgade in the Sankt Annæ Quarter. The site recalls the linear model as an extension of Stroget in 2 directions.
Vores By, is the old site for the Carlsberg industrial site, it has recently been awarded in a competition to a young Danish architect who proposed to make there a mixed-use 24 hour city [www.voressby.dk] and it does seem that Vores By, which lies right between Valby, the low rise residential district and Vesterbro, the hip and somewhat notorious district, could be a good transitional space for the users of both district.

Istedgade, is by notoriety, the red light area of Copenhagen, or at least the extension of it into the non inner city centre. But over the year, the area has become more hip then infamous, Istedgade of today is dotted by designer boutiques, small alternative leisure venues while fronting entire residential street blocks. Through utilisation of this line of activity from the city, Voresby could indeed be a good stop on the lifeline of the city.
ISTEDGADE/ENGHAVEVEJ
VORES BY
VESTEBRO/VALBY

CHAPTER IIb:
Analyzing the 24/7 Environment
Urban Vitality: Exploring spatial conditions of 24/7 environments for Netherlands.

CHAPTER IIb:
Analyzing the 24/7 Environment

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Voresby, is definitely not yet a 24/7 location and a lot still has to be done to utilise its existing potential on the Istedgade and through Enghavej, connect to the Kongenhavn district as well as the densely populated Frederiksberg. The site of the old Carlsberg is designed to be filled with podium blocks and wide open public spaces that are filled with recreational functions and event. Perhaps it would form a good end point to the vitality of the Istedgade that flows from the Inner City towards the main station and to Vesterbro.
Valby is the quintessential residential suburb, even with 2 major s-train stations, the only activity or life of the area is restricted to less than 500m from the station.

Judging by the density of activity and functions, Valby is most definitely not a 24/7 environment. Most of all, it lacks the potential to be, it is neither connected to any existing hotspots, or possess any attractions within to generate activity.
Urban Vitality: Exploring spatial conditions of 24/7 environments for Netherlands.

![Map of Valby Langgade and Valby with 24/7 categorizations]

- **Commercial**
- **Recreational**
- **Cultural**
- **Retail**
- **Touristic**
- **Institutional**

**Residential Density**

**Retail (Goods) Services/Locations**

**Institutional Services/Locations**

**Commercial Services/Locations**

**Chapter 11B: Analyzing the 24/7 Environment**
Urban Vitality: Exploring spatial conditions of 24/7 environments for Netherlands.

Recreational Services/locations

Retail (Consumption) Services/locations

Cultural Services/locations

Touristic Services/locations

24/7
No

VALBY LANGGADE
VALBY
VALBY

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Analyzing the 24/7 Environment

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Valby is purely for residential purpose and daytime living. The grain cell size is much too large, the smallest being at 300m each. The intensely residential nature without much supporting functions does nothing to generate the activity for the area. The 2 main infrastructural node, are active but only within their own action radius, and thus adds nothing to the urban vitality of the surrounding areas.
AMSTERDAM, NOORD-HOLLAND, NETHERLANDS

STATISTICS:
Area: 414 km²
Density: 2650 inhabitants/km²
Daily change in density: −8.7%
Amsterdam has a population of 1.1 million within its metropolitan reach and is supplemented by 3.5 million tourists a year.
The structure of the city is similar to Copenhagen, in the sense of orientation and canal belting (more evident in Amsterdam), resulting in a medieval city core, with relatively small grain cell size of no more than 100-200m street to street. This should work in the advantage of Amsterdam in activating its vitality potential. [source: www.atcb.nl]
Counts of Services:

Retail (Goods)
- 171 Shopping Centres
- 539 Department Stores
- 3731 Retail Locations
- 78 Convenience Stores

Retail (Consumption)
- 1525 Restaurants (no hotel)
- 1633 (Restaurants within hotel)
- 5298 (Snackbars, Cafes, Eateries)

Counts of Services:

Institution
- 889 Hospitals
- 3903 Pharmacies/ Clinics
- 300 Universities, Higher Education

Recreational
- 251 Theatres/Concert Locations
- 291 Cinemas
- 4086 Museums
- 125 Night based entertainment
Amsterdam has a potential zone of 5km within the city radius and despite the myriad of functions that are being supplied, little or none of them are operating after the extended time period. This could be the reason that the density capture of Amsterdam is so small to start with. In fact, the well known pockets of activity, Leidseplein, the Wallen, are obvious when viewing with clustering, but given the walkable distance action radius, the areas are just pure spots on the city fabric, existent, but not of enough critical mass or agglomeration effect to create a 24/7 environment within the city limits.
Clustering of services and functions within Amsterdam

As with Copenhagen, the leisure activities radiate from without the city centre, but start to get more and more dispersed as they hit the suburban lobes. The clear axis of the Damrak and the surrounding Canal belts are identified as potential areas for further development as 24/7 environments.
Density of 24/7 Environments and Surroundings

In Amsterdam, the centrum itself is very high in residential density, up to 13,000 inhabitants/km², and in the surroundings, only the Oud West city district is higher with 20,000 inhabitants/km². This rest of the districts are either slightly lower at well over 10,000 inhabitants/km² or further spread, like Watergraafsmeer, Zeeburg and Amsterdam Noord, well under the 5000 inhabitants/km² mark and 2500 inhabitants for Noord. This should ideally help with the potential of the city centre being 24/7 since it is so highly populated as it is.
CHAPTER III: CONDITIONS FOR THE 24/7 ENVIRONMENTS

[III]1. Guidelines
(For detailed examples, please see Appendix E: Quick Scan Data)

- **ACTIVITY**
  - Activity and signs of use throughout the various time spans.
  In Istedgade, Copenhagen, the daily urban services of electronic stores, bakeries, Laundromats and café, slowly give way to the extended hour’s services of restaurants, bars and pubs and that flow into the night time economy of all night dance clubs and music events all the while fronting 2 residential blocks, enabling constant activity on the streets and public space.

- **DIVERSITY**
  - User base must be varied.
  Diversity of functions and user base is also a hallmark of a successful 24/7 environment. The problem now seen in Westminster (See Lessons from London) is that the over intensity of drinking or alcohol related activity during the unusual hours are a cause for concern of the residents there. A successful 24/7 environment should allow for all spectrum of society to maintain public sense of comfort as well.

- **DENSITY**
  - Intensity of functions within the environment.
  A dense layout of functions within a short city block is usually the keystone in allowing for a 24/7 environment. In Little India, Singapore, you are able to do your groceries, have a meal and watch a street performance all within 100m of the 24 hour Mustafa shopping centre. The clustering of services around the 24 hour shopping mall as a generator is also an example of the spatial arrangement of a 24 hour space.

- **VITALITY**
  - Effect on the surrounding environments.
  The value of a 24/7 environment is the availability of services and opportunities for its users and resident/worker base. This plays also into the agglomeration effect of the environment. For example, the Mohammed Sultan area in Singapore was once a quiet side street, until the national newspaper company moved there and the editors decided to start a few night clubs along the side street for their workers who work off hours shifts mostly. This area is now the night club hub of Singapore and is never quiet even during the day.

- **POTENTIALITY**
  - Potential to grow beyond its existing boundaries and influence other potential areas.
  There was originally concern about the pub drinking culture of the British public as being anti-vital to the city as these activities just hole the users within a space and
turn them into mass volume vertical drinkers \(^1\) (Heath 1997). The approaches for a 24 hour city concept usually includes the aim of using 24/7 environment as a sort of urban regeneration or booster for the vitality both, spatial and economical, of the city (See Error! Reference source not found.). Further description of the effects and conditions will follow in Chapter III: Conditions and Chapter IV: Benefits and Detriments.

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\(^1\) MWD abbr. A person who consumes an excessive amount of alcohol while standing up.
—adj.

Example Citation:
A new expression is coming into vogue in London — Male Vertical Volume Drinkers (MWD). It seems these people do not take seats, be it in posh bars or popular pubs, but drink straight from the bottle, standing.

Earliest Citation:
The youngsters who dominate the "night-strips" are known as MWDs — mass volume vertical drinkers — because they are encouraged to stand in large groups, swigging from bottles.

MWD drinking requires neither comfortable furniture nor staff to wash glasses and pull pints.
—Ian Burrell, "Planners and police surrender city centres to Britain's mass volume vertical drinkers," The Independent (London), July 17, 2000
2. Indicators

"The degree to which all of these activities combine to constitute an evening economy is a function of critical mass and the level of economic maturity. This critical mass can also be dependent on the support structures which underpin the activities of the evening economy: transportation, lighting and policing. From the limited research that has been undertaken in the UK, in both cities and large towns, it appears that the evening economy represents anything from 5% to 15% of a local GDP. These jobs and money flows represent an important component of the local economy as a whole. But, of course, the character of the evening economy varies from place to place, depending not just on size, but rather catchment area and the draw a place exerts, the nature of its appeal to different types of people and the extent to which the urban environment feels safe."[Montgomery 1995]

2.1. Critical Mass

The critical mass of functions is entirely dependent on the size of the city as well as the population density. However, the relation is obvious from the analysis that when a population amount of 1.5 million is able to support a 24/7 zone of slightly less than 5 km and a potential zone of 15km [See Chapter IIB: Copenhagen] and in London, a population of around 8.5 million supports a active zone of around 8km in diameter, the minimal population size has to be above 1 million and any larger number will make a diminishing return on the active zone size, due to the infrastructural demand of travel.

2.2. Catchment area

Users of the 24/7 functions within Europe are limited to the daily urban system within the city, and thus limited by the catchment area of the transport and city system. Copenhagen and Amsterdam have in common that the catchment area is extended by the popular use of bicycle as a transport mode favourite. In both conditions, the areas of 24/7 activity, supported a surrounding districts of extremely high residential density (above 10,000 inhabitants/km2 up towards 20,000 inhabitants in the case of London. These surrounding districts form the backbone of the 24/7 environment, they feed users and perpetuate residence to work traffic that guarantees activity on the streets that are crucial to the vitality of the city.
CHAPTER III: Conditions
2.3. Grain Cell Size

A successful 24/7 environment can count on a small grain cell size of 50-300m per street block. This intensifies the functions and activities that can happen within the cell block and allows for more chances of activity and transactions.
2.4. Programs

Diversity of programs are also a key threshold criteria for a 24/7 environment. A singular urban system or 1 type of activities and user group does not provide synergy to the extending urban fabric. The similar functions found in the 24/7 cities include:

- Retail
- Consumption
  - Recreational/Leisure
- Cultural
- Institutional
- Tourist
- Commercial
- Residential

2.5. Urban Vitality through Symbiosis and Agglomeration

**Bahnhofviertel, Frankfurt**

The area around the main station of Frankfurt is cluttered with night time activities, recreational, leisure and food and beverages locations. The Taunusstrasse that leads from the main station is also notorious for the amount of vice and sex related locations it contains. This is a clear example of symbiotic relation between the main station and the Taunusstrasse, the spread of vice activity, stops within 500m of the main station and the density of other relatable functions around the vice street is also an example of clustering within generator - host relationships for urban vitality.
Geylang, Singapore.
All even number lanes on the Geylang arterial road is allowed for the vice trade within Singapore. The interesting phenomenon is that given the time budget of the vice users, the local shop keepers have made use of the opportunity to set up retail, food and beverage on all the street frontage areas. The clustering of vice activity was planned to regulate the vice trade, but has since gained an agglomeration effect in that all the well known eateries have set up shop along the main street front for the vice customers and now most of the population know that area for food, retail and as an after hours location without the influence of the vice trade.

Trinity, Spadina, Toronto
The university of Toronto sits on the junction between College and Spadina, and there are clusters of 24 hour laundry shops, cafes, supermarkets that cater for the students that are up at night. In addition, the Chinatown area east of Spadina has tons of late night eateries and leisure users recognize that place now for when they need something to eat at night. This is an example of an symbiosis mixed with clusters and gaining an agglomeration effect.
3. Conditions

Without judging the impacts of having 24/7 environments, part of defining the question of what it is, also require qualifying the attributes that can be associated with such an environment.

A point to remember is that all conditions were more or less potentially available in the cities and their environments. None of the 24/7 environment could exist out of thin air, they were the product of a fine balance and accumulative effect of the following conditions mentioned below.

These conditions are a compilation of knowledge gained from an extensive and explorative literature research over the issues of 24/7 environments, 24 hour economy, urban vitality and time-space conflicts. They are by no mean exhaustive but a rough list of potentials and conditions that have been constantly repeated throughout the studies.

3.1. Economical Conditions

There are 2 types of economical conditions to consider that of the affluence of the user base and the economical structure of the city that the environment is in.

Globalization

A global economy, contributes to the breaking down of geographical and subsequently time based economies, this adds to the push for more varied environments. Thus any economy that has a proportion of its sectors relying on the global trade can no longer afford to side step the issue of extended hours services, production and economy.

Leisure Economy

Growing affluence and willingness to spend more on recreation leads to the boom in the Leisure branch of the service economy, it is therefore prudent to always consider the effect of the tourist dollar and its symptoms (attractions, accommodations, cultural areas) in describing the conditions of a 24/7 environment. Although not all 24/7 environment is tourist based, it helps to extend the local critical mass and allows more sustainability of a previously local environment.

3.2. Socio-Cultural and Political Conditions

A 24/7 environment seems more susceptible to certain culture and social structure, as seen by the abundance of such in Asia and the United States. The following conditions are gleaned from the extensive literature research.

Multi-ethnicity and religion

A diverse society indicates a more tolerant and experimental society, more open to the idea of different rhythms and welcoming enough for sub cultures to sustain them. Urban rhythms, cultural especially determine also the usage of an urban environment. In Singapore, the times during Lunar New Year are especially 24/7 for the entire city, shops set up tents on roads to cash in on the crowd ready to do their New Year purchases at
any hour of the day. During the Ramadan, Muslims, engage in extra activities to celebrate the start of their feast at night. On the other hand, the popular knowledge of non-western ethnic groups being more willing to work harder hours in retail and services helps the contribute the diversity of ethnicity as an important condition. On the other hand an overtly singular religious culture will also mean that most of the society will adhere to a strictly parochial time spans, where the Sundays are sacred and most definitely not available for 24/7 environments to occur. Parts of the Netherlands have strong objections to 24 hour economy due to their religious choice.

**Individualism**

With the new social trend towards individualism, the hedonistic tendencies of society is more well represented and contributes in part to the increased spending on leisure and personal services, which also translates into a demand for those environments.

**Work Culture and the family unit**

Time expansion also means that workers will need to work longer hours or in shift. The willingness of the labor force to such labor division is crucial. The main objections are lack of family time. A culture where the family unit is of prime importance, monetary compensation for shift work or extra hours shifts will not be as well received and might form a handicap for a 24/7 city. On the other hand, a family unit now is also just as flexible if both parents can choose to work a different time span and thus still be able to share the housekeeping duties. In fact, the 24/7 societies might be an outlet for the continuous urban stress on the family and working unit.

**Governance**

Just in London alone, the structure towards licensing for a 24/7 environment is so multifaceted, involving all aspects of governance and legislation. What this shows is that any authority hoping to make a success of a 24/7 environment, needs to be flexible and horizontal in organization while following a structured vision for a desired outcome.

**Licensing**

The complication of the 24/7 environments are that most organizations are not streamlined enough to deal with real time complaints and incidents. Micro managing on the front lines of 24/7 environment is crucial to help avoid all the nuisances that some forms of 24/7 activities can cause.

**Vision**

For the case of Johannesburg, the JOBURG planning authority take pains to convert areas within the CBD into 24/7 active spaces, reclaiming back squatted empty commercial lots, allowing for a mix of residential uses and cleaning up public areas and squares. A 24/7 environment needs extra administrative effort and vision for it to succeed. Taking note that all the studied environments were already potential locations and all conditions that were vital were more or less present.
3.3. Spatial/Environmental Conditions

The intent of this research is to also try and isolate spatial conditions and patterns that are present in 24/7 environments. For a first round of analysis, based on information mentioned in the primary studies referenced, the following conditions repeat the most.

Accessibility

The most important condition so far is the accessibility of public transportation systems, in providing enough density of users to the area, for channeling the movement of the users across more areas in reach of more functions and thus enlarging the 24/7 environment.

Vehicular traffic is important for certain percentage of users traveling to and from the locations but mostly gives more value when it is diverted and the urban space released as public spaces.

Density

As Landry (1991) pointed out, any vital environment requires a certain mass of users to be viable. Thus, the density of each city’s population is a major starting point in determine the 24/7 environment.

In addition, 24/7 environments tend to find themselves within dense areas of tourist trade and attractions.

Public Space

As mentioned in accessibility, the abundance of pedestrian paths enlarges the urban space available to users and helps in constructing the base fabric of 24/7 environments, as well lit and secure squares, parks and streets are environments not restricted by boundaries and time.

Climate

Last but not least, climate plays an important role in determining what kind of 24/7 environment can exist in the city. Warmer climates have users who prefer to be active after sundown and cooler climates have deterrents such as cold and rain, all which contribute in some way to 24/7 environment usage. For examples, the prevalence of night time activities within Singapore, with the likes of the Night safari, night time golf playing and ‘pasar malams’ are social occurrences that deviate from the daily environmental rhythms to gain respite from the heat.

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2 Pasar Malam literally translates into Night Market in Malay. They are usually congregations of temporary retail booths along streets, public spaces or even on street level of high density residential areas (void decks) and run from late evening till early mornings depending on occasion.
CHAPTER IV: BENEFITS AND DETRIMENTS OF THE 24/7 ENVIRONMENTS

1. Benefits

1.1. Economical Advantages

Bianchini (1995:124) mentions the effect of the realm of the night time increasing or doubling existing economy due to the ease of reaching a wider catchment area by extending facilities opening hours, hence doubling the economy of regional cities.

- Leisure Economy

With most economy moving away from production and manufacturing economy, the turn towards Leisure economy is one of the most lucrative alternatives. For example, Singapore has invested heavily in trying to attract their share of leisure economy by providing 24/7 environments in the form of 2 new integrated resorts (non stop entertainment hubs) and recently a F1 night race contract. Currently, just the pub and club industry in the UK turns over £23 million (approx. USD$ 45 million) equivalent to 3% of the national gross domestic product. (Hobbs, 2003)

- Global demand

In short, no economy can afford to be limited by their time zone and working hours, when the rest of the world is striving for economic growth. Especially with the focus on the Asian economic boom, production time zones have to be more flexible and financial and business services even more so to grow their customer base.

1.2. Socio-Cultural and Political Advantages

- Diversity of choice

Any advanced society recognizes the advantages in providing for as varied a society as possible, a 24/7 environment is just another exercise of choice and free will from a community of different cultures and expectations.

- Female working force emancipation

In relation to time expansion, by encouraging 24/7 environments and corresponding services, more of the population would be free to work and still maintain a stable social life. When half of the population is no longer restricted by conventional working times and roles, the economic and social growth will be unimaginable. According to the US Department of Commerce from 1975 to 2002, the female labour force doubled with the growth of the 24 hour service sector and also added to the demand for services during unusual working hours due to the breakdown of conventional housekeeping times. (Presser, 2005: 3)

- Vibrant Cities

Competitive cities are the way of the future, each city is vying for the tourist dollar, the commercial investment and many ranking researches always look to indicators of vitality, quality of life and vibrant cultural scenes as signs of a healthy city. A 24/7 environment, when combined well, can provide all of those traits.
1.3. Spatial/Environmental Advantages

- Natural Surveillance and Safety of Public Areas
  “People are comforted by the sight of others. This means that safer streets, certainly after dark but also at other times, will tend to be streets where there are steady flows of people, high degrees of visibility and a mixture of age-groups and types of activity.” [Montgomery 1995]

Public areas are safer when populated and active. This “eyes on the street” concept from Jacob (1961) is still as relevant today as in the 60s. Encouraging activity in certain urban areas might be a better way of keeping crime rate at bay. Although conversely when not managed properly, a 24/7 environment could also facilitate crime increase.

- Symbiosis and Agglomeration Principles [See Chapter II]

The spatial activity and vitality of a 24/7 place should be able to ignite potential in surrounding urban fabric. The spatial advantages of having a 24/7 environment is that the chance of symbiotic spin off or agglomeration growth of the value of spatial functions within reach is easily encouraged.

[IV] 2. Detriments

Both sides of the coin have to be considered, however most damaging effects of a 24/7 environment have one thing in common, in that it was poorly managed or not well balanced or designed, as in the case of Soho previously mentioned.

2.1. Economical Consequences

- Incurred Costs

External costs will always be incurred when trying to regulate new policies and regulations, it will be a balance between the profit generated and the effectual cost incurred to determine the negative consequences of funding and maintaining a 24/7 environment. Undoubtedly, this is only when a 24/7 environment is purpose built and directed by an organization or authority.

2.2. Socio-Cultural and Political Consequences

- Anti-social behaviour

The “mass vertical drinker” of London’s alcohol premises and his anti-social behaviour is an unwanted side effect of the 24/7 environment biased towards alcohol consumption and vice. This would be handled much better if the 24/7 environment was monitored to maintain a good balance between recreational drinkers, other leisure users as well as residents and stakeholders.

Crime Rates

Although Robert and Turner (2005) indicate that crime rate seemed to have increased for the area, it is plausible that rowdiness and masses engaging in after hour activity might be a magnet for crime, but there has not been contrary evidence to prove that even if the masses and crowd were not present that the crime rate would decrease.
2.3. Political /Administrative Consequences

- Over legislation
A prevalent danger for any organization, flexibility in dealing with 24/7 environments is a prerequisite, but the urge to over micromanage might be a negative consequence for any society. License holders in the West End used to complain about the overwhelming conditions for different licenses prior to 2003.

Breakdown of the family unit

2.4. Spatial/Environmental Consequences

- Spatial overloading
Typical 24/7 environments now that are biased on type of activity tend to come into problems when the crowd leave from one area to another or back to home. The sudden overcrowding of the public spaces outside of these establishments are a key cause of concern for the west end residents in London.

- Noise Pollution
Noise pollution is inevitable when activity is going around the clock, judging by the increase noise complaints in Soho since 1993. This is an issue best solved by legislation and good design.

- Waste Pollution
A 24/7 environment eats into the traditional quiet hours that public utilities use to maintain and clear the streets. Careful management and scheduling would be prudent in tackling these issues.
CHAPTER V: POTENTIAL IN NETHERLANDS

[V1. Context of Netherlands]
To understand the possibility of a 24/7 within the urban system of the Netherlands, some background knowledge regarding its shortcoming and advantages are necessary to discuss. This following chapter is a short summary of the salient points from the policy documents that mention the context of the Netherlands.

1.1. Literature Research

Related Studies in short

Eurbanet1: Case Study Randstad

Three key issues were mentioned in the Eurbanet study, based on recommendation for policy outlines which are (Meijer & Hoppenbrouwer 2002:3):

- **Internal/external accessibility**
  
  The focus on internal and external accessibility delivers 2 important conclusions, the need for a Randstad-wide transportation system to harness the metropolitan potential of the individual core cities, which are stronger as a conurbation as well as the need for intensive spatial investments round the nodes.

- **Uneven spatial economic development (urban vitality)**
  
  There is a need to develop the metropolitan character of the Randstad region to attract international corporations and investments and that comes in the form of urban vitality in creating diverse quality living, working environments. This is also closely linked to the internal accessibility issue. Urban sprawl and loss of green areas are important considerations as well as retaining identity of places, reducing congestion and social problems.

- **Spatial diversity and quality of open space**
  
  The recommendations included new contours and administrative layers that were appropriate to the anticipated future of the region.

POLYNET: Randstad – focus amsterdam

- **Amsterdam stands out as location for most main offices and surrounded by smaller cities with individual merits**
  
  (Schiphol – transport, Haarlemmeemeer – logistic services, Amstelveen – advertising firms and Alkmaar – business services), this forms the hinterland for the producer services that are so prominent in the economy of Amsterdam.

- **Global players- choose Amsterdam for its surroundings.**

- **Amsterdam is top scorer for Global, Regional and European Connectivity.**

OECD Territorial Review: Randstad

Randstad as dense polycentric area of Western Europe, but still does not function as one region as of yet.

- **Low productivity growth comparatively.**

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1 Eurbanet Study on Randstad is 2 round report on first the benefits on adopting a regional perspective on planning and then specifying the future spatial policy outlines of the region. – Eurbanet : Randstad
• Does not exploit unique economic structure and differentiation of the 4 large cities.

• Needs to:
  i. Improve internal and external accessibility
  ii. Enable knowledge transfer from private sector
  iii. Increase flexibility in housing and labor markets
  iv. Change of governance framework to a more Randstad-centric vision
  v. Public transport improvement a priority

**Vele Steden maken nog geen Randstad**

“Vele Steden maken nog geen Randstad” (2004) published by the Ruimtelijke Plan Bureau, is a part of the research directed at exploring the dialogue regarding the context of the urban agglomeration within the Netherlands.

**Understanding of report:**
- Daily urban system, comparing only residential-work location process/flow, and residential-retail location process/flows.
- Randstad not a functional region
  In view of the study by RPB showcasing that the Randstad does not function as a unified daily urban system, the Amsterdam Region stands out as a potential contender for being a national core, showing signs of being a possible global city

- Amsterdam as main attractor for functions
  Amsterdam region with Amsterdam as a core has great traction in terms of attracting flows and processes.
  The rest of the cities are stronger on a level of local processes and flows.

- Hints at the possibility that if there is to be a metropolitan core, it might only be in Amsterdam Region.

**Social Trends**

**Multiple Choice Society: Social trends in times for Netherlands**

The following trends are the 4 major trends named in “The Multiple-Choice Society. Time and the organization of commitments and services” (Breedveld & van den Broek, 2003) for the Sociale Cultureel Planbureau of Netherlands and based on the Time Budget Survey describing Netherlands as a ‘highly demanding society’.

- Globalization
- Liberalization
- Individualism
- Time Expansion

The last 2 trends of individualism and time expansion is extremely useful as it signals the societies direction towards more personal services and recreational time and witnesses the time stress that is present in the Netherlands. Although it is also good to

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2 The Netherlands Institute for Spatial Research (RPB) is the national knowledge centre on space and planning. The Netherlands Institute for Spatial Research promotes a more informed public debate on spatial planning, is an independent centre of expertise on spatial development, serving the Government, Parliament and regional and local authorities in the Netherlands, and upholds a position of authority on the strength of its professionalism and independence. (www.rpb.nl)
note that in the study, Breedveld does not justify the existence of a 24 hour society within the Netherlands as yet given the constant working hours.

**Political Views**

“D66 wil een 24-uurs economie” – (www.nu.nl)
“Christen Unie zijn tegen 24 uurs economie.” – (www.verkiezingkijker.nl)

As usual there are contrasting views regarding the existence of 24 hour economy within the Netherlands. However, the obvious issue is that there has been no central authority as yet actively working towards a balanced and well managed 24/7 environment, even if signs of time expansion are rampant.

**Work and Family Issues**

(Summary of interview from the Sloan Foundation with Dr Bram Peper and Dr Laura den Dulk of the Erasmus University on Dutch Work and Family Culture)

- Dual income earners and late child bearing age means stress on the home front for many working adults who have young children to take care of as well as older parents.
- Time expansion as major organizations and firms push for a 36 hour work week instead of the 30 hours week.
- More women in part time labor and flexible time work is part of this possibility, however, majority of women are in unpaid labor of child caring and housekeeping.
- Lack of childcare facilities in general.

**Policy Documents, ambitions and goals**

**NOTA Ruimte**

Key national spatial strategy for 2020-2030, by the Ministry of housing, spatial planning and the environment (VROM) with ministries of transport, agriculture and economic affairs with the following goals and ambitions.

- **International competitiveness of Netherlands** – as most possible metropolitan area within the countries to compete with the rest of Europe.
- **Strong cities and a vibrant and dynamic countryside**
- **Development of national, international spatial status**
- **Public safety**
- **Growth:**
  1. Concentration of urban and economic development within existing structure to reduce pressure of constant expansion.
  2. Concentration zones with mix functions to strengthen existing cities.

- **Randstad/Deltametropolis as coherent entity**
- **To maximize spatial, cultural and economic diversity of region for competitiveness.**

**Randstad Holland**

Regio Randstad as administrative network

- None of individual cities large enough to compete with powerful European metropolitan regions needs coherent Randstad Region to do so.
• Scattered cities do not offer concentration of resources as traditional metropoles such as London, Paris and Frankfurt.

Peaks in the Delta
Ministry of Economic perspective on Randstad
• North-wing (Amsterdam) as primary centre for international business activity and international tourist attraction, with value in Schiphol as a international main port and Zuid As to develop into financial district.
• South-Wing is cause for concern as it has been performing below par for the past decades.
2. What are the existing potentials of Amsterdam for a 24/7 environment?

2.1. Existing Potentials

2.1.1. Economical Potential

- Tourist and Leisure industry
  The tourist industry generates EUR 4.5 billion annually for Amsterdam and Amsterdam sees 15,749,000 daily visitors, making its daily density increase to 21%.
- International headquarters
  Some 8500 (international and local) head offices call Amsterdam home and employ up to 55,000 workers. Amsterdam has been cited as the location within Netherlands for foreign companies, citing its qualities and surroundings.
- Service industry
  The strongest sectors of growth are based in the service industry and the city is known for its availability of services.

![Figure 2: Changes in economic sectors 2006 (O+S - Research arm of the Gemeente Amsterdam)](http://www.os.amsterdam.nl/feitenencijfers/23073)

2.1.2. Socio-Cultural and Political Potential

- Young and Multicultural
  25% of the creative sector of the country is present in Amsterdam, with most of the locations within the city core itself. The canal belt and surroundings are the most intensely occupied areas for the creative industries.

![Figure 2: Changes in economic sectors 2006 (O+S - Research arm of the Gemeente Amsterdam)](http://www.os.amsterdam.nl/feitenencijfers/23073)

3 Data source: Jaarboek 2006 from Dienst Ruimtelijke Ontwikkeling (DRO) and Onderzoek en Statistiek from Amsterdam. Available at: [http://www.os.amsterdam.nl/feitenencijfers/23073](http://www.os.amsterdam.nl/feitenencijfers/23073)
the fact that 48.5% of inhabitants are not natives of Netherlands, Amsterdam is socially structured as a young and multicultural city.

- **Young professionals choosing for a city lifestyle.**

  As reflected in their living situation, more Dutch native born from outside Amsterdam, choose to live near or in the midst of high level urban services. In addition, Amsterdam is attracting more students and professionals then before. Given the yearbook statistics, 37% of the students within Amsterdam are enrolled in tertiary education (higher professional education, universities etc).

- **Amsterdam’s characteristics according to inhabitants**

  The top 10 strong points of Amsterdam according to the locals are it’s diversity, cultural richness, multi-facet qualities, atmosphere, vitality, multi-cultural society, being a major city centre, leisure economy, neighborhoods and greenery. There is a strong attachment in the cultural richness and vitality of the city which is ideal as potentials for a lively city with many possible occurrences of 24/7 environments. The multi-cultural tolerance is also indicated that a 73% have a good or very good image of the other cultures within the city.

  On the other hand, the things which irritate the locals most include environmental pollution (garbage left on the street etc), anti-social behavior, canine feces, broken streets, busy traffic, criminality, dirty streets, over crowding, lack of parking spaces and teenagers who hang around. This indicates that when dealing with a 24/7 spaces, these will be the list of issues that will have to be paid particular attention to in the form of good design and/or policy and guidelines.

- **Amsterdam’s inhabitants involvement**

  48% of inhabitants are involved occasionally with their neighborhood or area while 26% are constantly active. This speaks of a social involvement in the urban fabric and indicates a potential in the society maintaining the urban space with own initiative.

**Signs of strong local political involvement**

Some numbers:
- ~80% are active voters in all municipal elections.
- 83% feel at home in the city.
- 84% feel connected to the city.
- 66% feel connected to each other.
- 68% are interested in local politics

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5 Data Source: CFI/CBS/Univ/O+S. Available at: [http://www.os.amsterdam.nl/feitenencijfers/23073](http://www.os.amsterdam.nl/feitenencijfers/23073).

6 Summary of results from De Amsterdamse Burgermonitor 2006 from the Gemeente Amsterdam Dienst Onderzoek en Statistiek arm (November 2006).

7 Summary of results from De Amsterdamse Burgermonitor 2006 from the Gemeente Amsterdam Dienst Onderzoek en Statistiek arm (November 2006).

8 Summary of results from De Amsterdamse Burgermonitor 2006 from the Gemeente Amsterdam Dienst Onderzoek en Statistiek arm (November 2006).
Amsterdam’s Environmental Policy – “Cleaner, Quieter and Safer”

Amsterdam Municipal Dienst Milieu & Bouwtoezicht (Environmental & Building Department) implements a detailed 4 year policy plan that regulates environmental aspects of the city to ensure a pleasant living environment in the municipality. The following items listed below are of instrumental value to a potential 24 hour environment to be successful within Amsterdam.

1. **Stringent rules** & inspections for commercial uses: focus on reduction of pollution, compliancy of regulation, resource conservation. This indicates a consistent central authority to reinforce regulation useful in dealing with the environmental waste of a 24 hour society.

2. **Delegation**: The boroughs are held responsible for their own area which would allow for more micro management of the 24 hour situation.

3. **Fine Grained Control**: a brigade of 30 environmental police officers as well as a graffiti control group patrol the city to establish environmental control at a detailed scale operating with monetary fines as an instrument coupled with a 24-hour hotline for noise, night time activity and pollution translates into fast response and ability to keep atop of a 24 hour environment.

A strong local involvement in politics gives for a more flexible administration system allowing for real time reaction to the problems that might be caused on the local neighborhood scales of 24/7 environments.

Amsterdam’s Ambition

Political and administrative ambition is a key potential for any city or region. Motivation begins with inspiration and with a situation as complicated as creating 24/7 environment, the wish for a vital city goes hand in hand with the determination and consequent success of undertaking such a task. For further reference, a summarized selection of key ambitions as stated in official documents follows. (Refer to Appendices D Error! Reference source not found. for more details on the selected documents listed in Table)

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<table>
<thead>
<tr>
<th>Document</th>
<th>Level</th>
<th>Key points</th>
<th>24/7 environments could mean…</th>
</tr>
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</table>
| Mensen maken Amsterdam – (Alderman College Resolution 2006-2011) | Municipal | • Strong Economy  
• Attractive City (International & Creative)  
• Quality of Life  
• Social Improvement  
• Security and Safety | • Boosting of tourist, leisure and services sectors.  
• Competitive environment to the rest of the top cities of the world.  
• Providing alternative lifestyle choices and availability of services and functions around the clock  
• Job opportunities, female workforce emancipation  
• Street safety and security in a city that is constantly active provided proper balance of function is found. |
| Metropool Amsterdam | Municipal | • Municipal to Regional Borders - Intense, exponential growth  
• Amsterdam as centre for the metropolis of the North wing (Paris-Amsterdam)  
• Amsterdam as an open metropolis  
• Amsterdam as hospitable metropolis | • Living and working beyond municipal borders means that the critical mass of 24/7 environments is drawn from outside the city boundaries as well.  
• Amsterdam with 10 million tourists, about the same size as Paris, can afford to be denser which adds critical mass to 24/7 environments.  
• Tolerance for all lifestyles, housing for all types, variety in environment.  
• Focus on leisure, tourist trade and heavy investment in public spaces and facilities. |
2.1.3. Spatial Potential

- Main ports and gateways
  Amsterdam is home to Schiphol, the nation’s main international airport that sees 42.5 million visitors a year, the High Speed Line (international high speed train) is scheduled to stop in Amsterdam in 2008, greatly increasing the global connectivity of Amsterdam. Not to mention that the Amsterdam port was ranked the 2nd busiest port region together with Antwerp and Rotterdam as a region.
  Amsterdam has 8 major train stations and the city core is densely covered by trams, metro and bus services. Not to mention that due to the small cell size of the inner city, the ease of getting around by foot or bicycle contributes greatly to the transportation accessibility of the city.

- Fine grained city core structure
  The inner city core with its canals and radial street grid has an average cell size of about 300-1000m, which leads increased urban density of functions and accessibility of the area.
  This small cell size is also a reason that there is a multitude of functions situated within a very limited urban space.

- Variety of urban structure
  The city is made up of multitudes of urban structure, from the tourist core, to the canal belt and the suburban expansion zones. Within the canal belts and the core, there are a multitude of residential, public and commercial areas which allows for a high density of mix of functions.

2.1.4. Localized Conditions

Possible locations for 24 hour environments
Based on the study “Stedelijke Vrije Tijd – Multirecreative Milieus in een GIS model” by Bindert de Haan, K, Gadet, J and Tushuizen, S of the Municipality of Amsterdam, urban leisure spaces are accounted for spatially.
The following functions are taken into account and measured for their density and location within the city:
- Cultural Facilities
- Sports and recreation
- Hotel, Food & Beverage Industry
- Retail and shops
- Parks
- Public Spaces
- Recreational Water bodies
This gives an image on where there is a highest concentration of services and facilities that are conducive for a 24/7 environment within Amsterdam. The location of these places within the historic, tourist core is not surprising, but the eastern sides of the canal belts score especially well and are possible locations for a flourishing 24/7 environment.

The following image is based on the study data on a cell grid of 500 by 500m. Another possibility for a location would then be the Zuid as of Amsterdam. It is touted by the municipality is the future central business district of Amsterdam with the introduction of multi-functional facilities and spaces.

A look at 24/7 structures of Amsterdam
For Amsterdam, the typology of choice is that of the concentric at the metropolitan level due to its urban structure and radial growth.
On an urban scale, the area of the canal belts will benefit from a grid structure with the central core and surroundings a linear structure leading from the central station towards the end of the canal belt. The Zuid-As development, however, looks more like a linear development along the A10, as it is bounded on one edge by existing urban structure.

Due to the shortage of time in exploring the Amsterdam in details, additional analysis on Amsterdam will be added in the Appendix E: Quick Scan section,
CHAPTER VI: ROLE OF THE URBAN PLANNER

[VI] What role can the urban planner play?

Licensing hours
The growth of the night time economy in Britain is in part due to the Licensing Act 2003, there was a growth of 29% of all hour’s establishment since the implementation of the Act in 2003. This is the most direct method in stimulating the 24/7 environment. Unfortunately, as a planning professional, the only influence an urban planner could have is in identifying and recommending approaches to vitalize the urban environment. It is crucial to ask for flexibility in opening hours and times, this encourages all function providers to be able to operate at their own time. This could mean extended hours for non-leisure related service providers.

Urban Zoning
The issue that most modern city has now is the limitation in the growth of the city due to the zoning of suburban areas in the surrounding areas. In Amsterdam, the grain size gets rougher as we travel down the city lobe into the newer residential areas. These places of urban zoning eliminate the spontaneity of activity and transactions that could occur within a smaller cell size and flow grain.

1.1. Using the 24/7 environment as a tool
Economic Development
With the aim on improving economic development of Manchester, the Manchester council started to incorporate plans to activate their 24/7 city since the mid 1990s, now Manchester is a successful all hours city and their economic figures have never looked better. The urban planner is limited in making suggestions and advice, but with further research, the possibility of showing profit by activating a 24/7 environment can also fall within the role an urban planner could play.

Urban Regeneration
For a while in the late 1990s, the term urban vitality and 24 hour city was bandied about like a magic solution to the crisis of suburbanization and the emptying of cities in the United Kingdom and the United States. Intention wise, the enthusiasm of the 24 hour city as regeneration cure all was not misplaced, but its execution was. 24 hour cities of today are generally acknowledged as a downward spiral of more drinking and crime related environments, in the West End of London, a fight is being put up by trying to balance the user interests and user groups that both visit and live in that “stress area”. Currently, a plan for Vores By in Copenhagen is being planned by a Danish architect, to revitalize the old Carlsberg factory 6km from the city centre. The area is indeed suitable for urban regeneration in the form of creating a 24/7 environment, as potentials for it already exist along the axis leading to the city centre.
If indeed intended, the planner could expand the public areas from the factory to the main street of flow (Istedgade), to form a conduit for the urban vitality within the city.
[V]2. **24/7 Tools**

2.1. **Identifying the 24/7 environment**

**Definition:** An environment that allows for multiple urban rhythm within a finite area. The defining of a 24/7 environment is supported by a 5 fold criteria. If an environment is

- **ACTIVITY**
  - Activity and signs of use throughout the various time spans.
  - Identifiable by isolating the opening times of the locations and services to see the changes in usage throughout the 24 hour day

- **DIVERSITY**
  - User base must be varied.
  - Count of services across the 7 major services genres, separated again with time and theme as criteria.
• **DENSITY**
  - Intensity of functions within the environment. Isolation of functions and then recalculated for the basic action radius gives a prediction on the whereabouts of the 24/7 environment core.

• **VITALITY**
  - Effect on the surrounding environments.

• **POTENTIALITY:**
  - Potential to grow beyond its existing boundaries and influence other potential areas.

It qualifies as a 24/7 environment. Further research can then be brought about by isolating the services, functions, user groups and processes over the environment to examine what the best way to channel the flow of urban vitality within said area is.

2.2. **Thresholds**
As examined before, the spatial thresholds that are of concern are:
- Urban Density
- Population
- Area
- Count of Services
- Urban structure

These all play a part in determining the quantity of 24/7 environment able to be activated.

3. **Is there a role for the Urban Planner in a 24/7 environment?**

**A collaborated effort**
In the profession of an urban planner, you learn very early on that you cannot function on your own, gone are the days of the master city planner. Each city studied in this research has shown that a city is an effort of an army of organizations both public and private. The city of 24/7 environment is even more so the case. The lessons learned from London included at least a dozen different city authority, borough authority, associations and business development organizations. One key instrument that comes back in the 24/7 city is that of an active and overseeing influence from the central city authority, without the support of which, none of this is possible.

A collaborated effort is therefore necessary for the 24/7 environment, and usually must start with the central planning agency, in this case, the Municipality of Amsterdam. A 24/7 city is in line with the vision they have for a vibrant and exciting Amsterdam and would benefit from an active role at an early stage to ensure the success of the environment.
The role of good design
Good design is the differentiation between a successful and a problematic 24/7 space. As seen in Soho west end, problems need to be planned for and designed for way before a 24/7 space can flourish.
In Amsterdam, the quality of design of the municipality planning department is up to the task at hand and with a consistent public space and environmental policy, there is promise for a successful 24/7 environment in Amsterdam.
APPENDIX

A: THESIS PLAN
B: THEORETICAL FRAMEWORK
C: METHODOLOGICAL FRAMEWORK
D: MAPPING THE 24/7 ENVIRONMENTS
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1. **Motivation**

1.1. **24/7 environments within the Network**

Certain urban areas are alive, vital and crucial, in terms of benefiting the social and economic structure of their cities and countries because they have multiple life spans. They do not just shut down and go into stand by after the normal working/shopping hours. Instead they blossom and take on a completely different face and subsequently a different society. When we think about cities full of vitality and life spans that go beyond the normal waking hours, we think of global cities such as London, New York which are also capitals of capital, economic strength, buzz and success. Such urban systems\(^1\) make full usage of their structure and elements with continuous processes and flows. (Klaasen, 2005)

Spatial planning of today, seldom take into concerns regarding the usage of space in a temporal fashion (Klaasen 2005, Drewe 2005). Planning and design are extended within visions and expected goals in terms of years, however, neglect the importance of planning the details of a finer temporal grain\(^2\) is to the vitality and success of an urban area. Given the state of current urban settlements to proceed into sprawl and fragmentation, it seems highly illogical to continue using whatever precious space we have left only within a pre-conditioned notion of time. Not to mention that given the limitations of the simplified models of reality that urbanists have been conditioned to work with, the element of time has barely been taken into account, voluntarily or involuntarily. Under the auspices of the Network City studio, which studies the network society\(^3\) in terms of an urbanism of networks\(^4\) (Dupuy 1991), which relates reality as a system of networks which include the temporal dimension, I wish to explore urban vitality in the form of 24/7 environments as a condition of success and well being of an urban system.

Understandably, intangible qualities of urban systems such as vitality cannot be forced upon a city, but it could be encouraged given an acknowledgement of the existing potentialities and then developing them. My motivation is therefore to explore what potentialities nourishes an urban situation such as a 24/7 city and if possible, to simplify them collectively as a tool set that could perhaps be able to be applied to metropolitan areas to be designed and planned, under the context of urban systems within the Netherlands.

2. **Problem Definition**

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\(^1\) Urban systems: Klaasen (2005) classifies urban systems as not only cities and urbanized regions but also parts of cities, entities of socio-cultural, spatial-ecological, economical-technical and administrative-organizational elements, relations and processes and add that urban systems are extremely complicated open systems (Doxiadis 1968:189; Peursen 1986:57) while deducing 3 key ideas of attribute (element), structure and their inter-relation from the systems theory, which she cites from Harvey’s definition that a system exists of a set of elements with certain variable characteristics (attributes), a set of relations between these element-attributes (structure) and a set of relations between the element attributes and the environment of the distinguished system.

\(^2\) Temporal grain: smallest difference that we wish to, or are able to perceive, conceive or represent while not yet designating it as ‘equality’ is the ‘grain’ of the perception, concept or representation (De Jong, 1992:16)

\(^3\) Referred by Rooij (2005) as a society, in which social, economic and cultural structures are not solely determined by the shared use of certain space, but also (primarily) by the connections that an individual actor has with places, persons, or activities elsewhere.

\(^4\) Explained distinctly by van Schaick (2005) in comparison with Heeling, Lefebvre and Castells as an approach which views the relation between the actor and different types of collectivity and the relations between virtual and real aspects of the networks that makes up today’s society.
The Netherlands ranks well on most hard indicators of economy, societal and cultural rankings, it is poised favorably geographically in a cross roads of successful urban agglomerations of the Pentagon\(^5\) (Vogelij 2005), yet comparatively, it barely registers a metropolitan buzz and indications of urban vitality. This contradicts to the international concurrence advocated by the 4th and 5th national planning documents which pushes the concept of a connected urban metropolitan system in the vision of the urban agglomeration known also as the Randstad or more currently, the Deltametropolis\(^6\).

Unlike buzzing metropolises within close geographical and cultural proximity such as London, Paris and Berlin, one would be hard pressed to locate consistent 24/7 environments within the Netherlands, be it due to cultural, historical, social or political inclinations of the nation.

In a brief reactionary observation, one could assume that the major cities lack a certain “je ne sai quois” in the form of a metropolitan vibe and the availability of round the clock living, working and leisure conditions, in short a quality of life. This thesis looks to identify the potentialities of urban vitality within the context of Western Europe, with Netherlands as a main contextual focus. This is accompanied by understanding viability of said potentials by means of comparison from her more successful metropolitan counterparts.

Sub issues:

2.1. **Urban Vitality: Potentials and indicators for vibrancy and their viability**

Any space in a successful city at present operates on more than one scale and time zone; the condition of local/global forces permeates every level of the urban and its cultures. Comparatively, the cities within the Delta metropolis rarely makes it on any list of cities, not as a major global force, not as vibrant or livable cities and not as one of the economic powers. What is necessary for a vibrant urban region and how can we apply the requirements of vitality and multi-functionality into the planning of any urban area is the problem that should be considered by any self-respecting urban region wishing to improve itself.

2.2. **Time in Space: Redefining the grain of urban systems and rhythms**

There has been little or no mention of time and human activity in spatial planning other than to plan for long term goals of years, if not decades. (Klaasen, 2005) The smaller grain of hours, days, weeks and months are generally ignored as too unpredictable and minute a detail to consider. (Drewe, 2005)

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\(^5\) Pentagon: defined as an area cornered by 5 major cities (Paris, London, Milan, Munich and Hamburg) identified by a DATAR study as the European economic core where 40% of economic activities of the continent occurs.

\(^6\) Deltametropolis as the name of the metropolitan area in the western part of the Netherlands has been introduced by Amsterdam, Rotterdam, The Hague and Utrecht in 1998 in a document Declaration Deltametropolis. Delta refers to the delta of Rhine ans Meuse as a constant reminder of the character of the natural environment and the typical conditions this creates for any form of human land use. Metropolis refers to the ambition to be part and parcel of the European network of world cities. To this end the present rather loose collection of towns and cities has to be transformed into a tightly knit urban system to improve synergy by improved interconnectedness and interaction. (Frieling 2000)
Generally, if Time = Money and Space = Money does that not mean that the introduction of time in spatial planning could be crucial to the success (financial or spatial) of an urban space? In the veins of Dantzig and Saaty (1973), who advocated a theoretically efficient model for compact city living, the wastage of valuable space in time will be accounted for, in terms of regulations, cultural and societal difference.

For further consideration, this passage from Drewe (2005) quoting Boulin & Muckenberger then Gwiazdzinski cannot be better rephrased:

“Why is time important? Why has it become so important that it features - at least in some countries - on the political agenda? Could it be that time has undergone significant changes that clash, with cities or space lagging behind? Has not the demand of citizens expanded and diversified, whereas the urban service supply, to a large extent still functions according to traditional rhythms.” – P. Drewe in Time in Urban Planning and Design in the ICT Age.

2.3. Further Definitions:
Metropolitan Region: Deltametropolis or the Randstad

Within the glorious bastions of Dutch national planning, the 1980s bore witness to a movement to improve the international or rather inter-regional competitiveness of the Randstad region, this discussion has gone on for 2 decades now and there is still no clear grasp of the state of affairs other than the inclusion of intercontinental high speed passenger line and a few complementary national key projects.

As Klaasen (2006) so succinctly refers to Salet’s derision of the concept as a marketing spin, while basing her findings from the report “Vele Steden maken nog geen Randstad” (2004) published by the Ruimtelijke Plan Bureau, a part of the research is directed at exploring the dialogue regarding the context of the urban agglomeration within the Netherlands.

As interesting as the above considerations are, however, this research will stop at highlighting the process as a brief summary on the state of affairs in the consideration of urban systems within the Netherlands as a contextual overview to the issue of urban vitality and quality of life within the systems.

The purpose of this research is not to enter into discussion or to take a position within the 2 approaches but to recognize their existence as a context creator for the region.

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7 The Netherlands Institute for Spatial Research (RPB) is the national knowledge centre on space and planning. The Netherlands Institute for Spatial Research promotes a more informed public debate on spatial planning, is an independent centre of expertise on spatial development, serving the Government, Parliament and regional and local authorities in the Netherlands, and upholds a position of authority on the strength of its professionalism and independence. (www.rpb.nl)

8 The definition of urban region will be further defined in the section Research Method.
3. **Aims of the Study**  
The eventual aims of this study are the identification of a set of design methods or tools to aid in the identification; strengthening or creation of a 24/7 urban environment, if so desired, through the study and analysis of existing examples and apply the dimension of time in spatial planning and design based partly within the western European context.

3.1. **Objectives**  
3.1.1. Hypothetical definition of 24/7 phenomena  
- A definition of 24/7 as a construct of spatial, economical, cultural and political context
- Identifying Spatial Occurrence – isolating spatial typologies around 24/7 environments
- Identifying Economic Competitiveness – relation between economic benefits and 24/7 environments
- Identifying Cultural Trend – Quest for the creative class and heightened quality of life as a emerging global city trend
- Identifying Political Vision (or there lack of) – policy that grows or deter 24/7 occurrences

3.1.2. Relating 24/7 as symptom of urban vitality  
- Create a tool that allows for the application to desired cities or areas to grow and allow 24/7 environments to enhance urban vitality.
- To asses the vitality of an urban area based on a set of indicators such as existence of 24/7 environments within it.

3.1.3. Urban vitality within the Netherlands  
- Locating pre-existing conditions within the Netherlands namely within the intuitive cores of Amsterdam or even Rotterdam which might have great potentials as carriers of 24/7 environments
- As a contextual background carry out comparison of data and evidence from neighboring successful metropolitan regions to identify a trend and direction for the further development of the Netherlands metropolitan region or cities

3.2. **Disclaimers**  
3.2.1. This is not...  
- A design to create a 24/7 city
- Delving into the endless amount of data (inconsistent) from cities or regions
- Making those endless city ranking lists
- A political recommendation regarding issues on Deltametropolis or Randstad
- Urban design that is site and context specific

APPENDIX A: THESIS PLAN
4. **Research Question**

4.1. **Vital Signs of a city**

The city is alive, it is an open system (Klaasen 2005) complex and wonderful in all its myriad variety, where do you start to take the pulse of the city and run diagnostics?

4.1.1. **Potentialities within 24/7 Cities**

The following points have to be researched and analyzed for a comprehensive understanding of 24/7 cities of the world. The intention is for the collection of data in a visually understandable comparison chart as the base for the research study.

- What are indicators\(^9\) of 24/7 environments, explored in the 3 main sections of economy, demography and networks
- What are the impacts of 24/7 environments?
  - Safety and security issues of extended hours activities
  - Environmental considerations regarding pollution, for example, noise levels
  - Social issues of emancipation and extended working times
  - Political decisions aiding and hindering 24/7 environments
  - Cultural trends and shifts towards advance consumer services and capturing the creative class as well as enabling marketing of a region’s quality of life
- If and how does 24/7 functions contribute to vitality of urban areas
- What is the measure vitality?
- How to identify the potentialities of vitality in a city?

4.1.2. **Consideration of Time in Space with 24/7 activities**

Time, at least of the daily, weekly and monthly variety has largely been ignored as a guideline in spatial design. A way of compacting and utilizing space could be to give it multiple life spans throughout a given day, hence the use of the term, 24/7.

- Current thoughts on Time Space in the field of spatial planning?
- What other forms of Time expansion are present?

4.2. **Urban Vitality in the form of 24/7 environments in the Netherlands**

\(^9\) Charles Landry very succinctly defined his methodology of urban vitality by identifying certain indicators which are important to his study and proposes that each indicator requires a critical mass to prove urban vitality.
4.2.1. In view of the study by RPB showcasing that the Randstad does not function as a unified daily urban system, the Amsterdam Region stands out as a potential contender for being a national core, showing signs of being a possible global city (GaWC\textsuperscript{10} 1999)

- Where or what is the functional urban system of the Netherlands?
- What policy are there regarding 24/7 environments in the Netherlands (Amsterdam, Rotterdam)
- Where are the 24/7 environments existing in Amsterdam
- Where and what are the indicators of Amsterdam and can more be done to infuse a 24/7 vitality into it?
- What is the potentiality of the other urban regions within the Netherlands, for example, the region of Rotterdam with its harbor activities

\textsuperscript{10}GaWC Inventory of World Cities (1999 Edition) An attempt to define and categorise world cities was made in 1999 by the Globalization and World Cities Study Group and Network (GaWC), based primarily at Loughborough University in Loughborough, Leicestershire, England. The roster was outlined in the GaWC Research Bulletin 5[4] and ranked cities based on provision of “advanced producer services” such as accountancy, advertising, finance and law, by international corporations. - Amsterdam (6 pts) as an incipient minor world city behind Alpha cities London, Paris (12 pts); Frankfurt. Milan (10 pts) and Beta city; Brussels (8 pts) - [www.wikipedia.org](http://www.wikipedia.org)
5. **Research Method**

The research approach takes a process oriented (Klaasen 2004) view of the system of reality by first delving into the finer details of the elements-attributes, such as 24/7 environments relating to urban vitality and defining it as a condition and the potentialities that create it, followed by exploration of the context which the discussion is generated, the Western European and specifically the Netherlands, subsequently the discussion is then placed in the wider framework of the consideration of time in spatial planning and the model of the network city.

5.1.1. **Urban Vitality and Time**

To explore the 24/7 phenomena as a condition of urban vitality, the research will focus on first the identification of 24/7 environments and signs of vitality in comparable city regions and inventory of similar conditions within the Netherlands in the following methods:

- **Research Analysis** – 2 major world cities outside Netherlands will be dissected base on a common set of criteria to extricate the characteristics of the environment which makes them 24/7 and vital.
  - The cities are chosen based on first and foremost, a recognizable quality, a common sense approach and then analyzed further for commonality, followed by a cultural background similar to that of the Netherlands as cultural indicators seem to be a big factor in terms of urban vitality (Majoor 2006). Therefore for now, the cities in consideration are London (as an existing vital centre), Paris (recognizable and planning to introduce 24/7 in planning, if the Mayor Delanoe has his way) (Rubin, 2006)
  - Care also has to be taken to not over extend the research into an empirical data controversy based on the fact that the each city will have its own source and data. For this purpose, a general overview of data should suffice

- **Theoretical analysis** – Theories on urban vitality and time-space usage will be read, categorized and processed in a position paper regarding the concept of urban vitality (Landry 1994). This research leans heavily on Landry’s methodology but will defer by focusing on the discussion on urban vitality and time geography with a spatial angle

5.1.2. **Determining an Urban System**

- Common understanding the urban system of the Netherlands of a Functional Urban Region based on POLYNET research (Hall and Pain, 2005)
Secondary analysis is carried out on data from the possible cores of Amsterdam and Rotterdam (regions) to identify potential and existing 24/7 environments.

5.1.3. Space in Time
- Surface the examples of time consideration in spatial planning, such as Multiple Intensive Land Use, time expansion and flexibility.

5.1.4. Research Inventory
- Creation of a research inventory that judges and analyzes each study for their merit in terms of giving an overview, analytical criteria, theoretical underpinning, methodology and proposals.
- Collective glossary of terms which might be familiar / unfamiliar to each of the different fields encroached upon.
6. **Final Products (please refer to Time Management Plan)**

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7. Conceptual Schemes
Urban Vitality as generated by the processes of urban rhythms upon urban systems.
8. **Relevance**

8.1. **Societal Relevance**

8.1.1. Vital cities in the foreground

As traditional definition of national territorial boundary and administrative bodies are deconstructed more than ever, we see a focus on the importance of the success and value of the city, so distinctly highlighted in the 10th Venice Architecture Biennale, where the city, metropolis takes centre stage in terms of political, social, cultural function. We return to an era envisioned by Jane Jacobs where the diversity and detail of a city is of vital importance to its economic and social health.

"Paris aims to become 24/7, attract the creative class

Did you know Paris, unlike New York, London and Tokyo, is **not** a 24/7 city? Most restaurants close on Sunday and do not serve after 10:30 pm in the evening; supermarkets close at 9 pm; long working hours are unheard of; the subway closes between 1 am and 5 am. Does that make a difference? Tremendously, according to Christian Sautter, the **deputy mayor** in charge of economic development and finance, "When we came into office in 2001, we had a city proud of its history, its beauty, its tourism, but employment was decreasing, population was decreasing, young families could not afford to stay here because they had trouble finding affordable housing. So we decided to work in three areas: **culture, high technology and transportation.** " And to Paris Mayor Bertrand Delano, that means **greener, more high tech, less uptight.** -Neil Taekemoto, www.cooltownstudio.com “

When the economic outlook of Europe is gaining momentum, will Netherlands choose to be a focal point within the Pentagon or take a subsidiary role is a question that the research will not answer, but try to present the potentials which is in its possession.

8.1.2. Effects of 24/7 Living, Working and Playing

This research is about potentials and differentiations has in terms of an urban environment and what are the tools available to make and implement choices, in light of this and how the research values the sanctity of choices and will therefore also present the detriments to having 24/7 environments, in terms of health, social structure and public security.

8.1.3. “Randstad is the only Dutch city”

As witnessed in developed society, a sense of identity and image is vital to the success of the community. Netherlands should channel its diversity to its benefit and the constant dragging of feet on issues of spatial policy and planning can not be good for the country.

8.2. **Scientific Relevance**

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11 A colloquial joke referred to in www.wikipedia.org
The research takes on qualitative issues such as vitality and quality of life from an angle of spatial planning. Amongst others, the discussion of urban systems, network model of planning and time geography are also considered from the spatial framework.

8.2.1. Vitality of Urban Systems
Jane Jacobs started with the concept of vitality of a city and Landry expanded it to critical mass with all the trappings of modern terms and conditions. Simply put, the life of the city is a worthwhile discussion to enter into, since it might be one of the most intangible factors to condition and manipulate in an urban system. This research will also bridge across the theories of urban systems (Klaasen 2005), urban vitality (Landry 2001) and image branding of a city, which are all worthwhile in this age of campaigning for your global home city.

8.2.2. Evolution of a network society in an incipient metropolis (NL context)
Sassen wisely sidestepped a definition of a global city (2001) and perhaps that is the most prudent choice, as each city can be judged unique and therefore hard to define. What is the complaint of lack of space in the Netherlands, while compared to Asian metropolises like Delhi or Shanghai? What defines a metropolis is not the question asked here, but what the commonalities within metropolitan cities are.
The fragmentation of urban structures within the Netherlands is a result of the planning directions of selective consolidation throughout the decades, this gradual evolution into a network society is only one form of containing the urban sprawl.

8.2.3. Temporal conditions of vitality in planning of metropolis
The distillation of time and space as a manifestation of societal and cultural processes is long overdue in the field of spatial planning.
Bridging on the work accomplished by Van Schaick so far in connecting the realms of time geography (Hägerstrand, Dantzig & Saaty), sociology, and this research aspires to contribute with a tool set useful to the urban planner in understanding these distinctly separate fields of knowledge.

9. Disciplines
A list of possible areas which the study will cross into:
- Regional Planning and Design
- Time in Spatial Planning
- Sociology
- Time-Geography

APPENDIX A: THESIS PLAN
Appendix B: Theoretical Framework
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B1. Introduction

This theoretical consideration will dive into the phenomenon of 24/7 cities in 2 magnitudes, the first of which will be addressing urban vitality and the other, the issue of time in spatial planning. Both approaches are taking diagnostic of the health of a city. They are the spatial planning equivalent of a full body check up coupled with a cardiac monitor to determine the time frame of urban fabric.

The direction of this consideration, first sketches the flesh of the research by exploring the theories regarding urban vitality as that is a crucial condition to the existence of a 24/7 city, followed by judging each theory and positioning this research between them. The choice of Jacob and Landry is to give an overview of the popular lines of thought still available on vitality today, while engaging a reactionary view from the 1960s as well as a progressive approach in developing a creative city in the context of present times.

This is then accompanied by the structural backbone of this theoretical consideration which is the contemplation of time factor within spatial planning and identifies the main lines of thought which the report identifies with. The essay will then zoom out to take in the overall picture which positions the research within the framework of urbanism of networks, in approaching the city, the region or reality as an environment of urban systems (Klaasen 2004).

1.1. Research Motivation: 24/7 Cities
(Excerpt from thesis plan)

Certain urban areas are alive, vital and crucial in benefiting the social and economic structure of their cities and countries, because they have multiple life spans. They do not just shut down and go into stand by after the normal working/shopping hours. Instead they blossom and take on different facets and subsequently a different society. When we think about cities full of vitality and life spans that go beyond the normal waking hours, we think of global cities such as London, New York which are also capitals of capital, economic strength, buzz and success. Such urban systems\(^1\) make full usage of their structure and elements with continuous processes and flows (Klaasen 2005).

Spatial planning of today, seldom takes into regards the usage of space in a temporal fashion (Klaasen 2005: 181-196; Drewe 2005:197-212). Planning and design are

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\(^1\) Urban systems: (Klaasen 2004: 21) classifies urban systems as not only cities and urbanized regions but also parts of cities,... entities of socio-cultural, spatial-ecological, economical-technical and administrative-organizational elements, relations and processes and add that urban systems are extremely complicated open systems (Doxiadis 1968:189; Peursen 1986:57) while deducing 3 key ideas of attribute (element), structure and their inter-relation from the systems theory, which she cites (Klaasen 2004: 12) from Harvey’s (1973:451) definition that a system exists of a set of elements with certain variable characteristics (attributes), set of relations between these element-attributes (structure) and a set of relations between the element attributes and the environment of the distinguished system.
extended within visions and expected goals, in terms of years, which however, neglect the importance of detailed planning at a finer temporal grain\textsuperscript{2}, to the vitality and success of an urban area. Given the state of current urban settlements to proceed into sprawl and fragmentation, it seems highly illogical to continue using whatever precious space we have left only within a pre-conditioned notion of time. Not to mention that given the limitations of the simplified models of reality that urbanists have been conditioned to work with, the element of time has barely, voluntarily or involuntarily been taken into account.

Under the auspices of the Network City studio, which studies the network society\textsuperscript{3} in terms of an urbanism of networks\textsuperscript{4} (Dupuy 1991), which relates reality as a system of networks including that of the temporal dimension, I wish to explore urban vitality in the form of 24/7 lifecycle of a city as a condition of success and well being of a urban system.

Understandably, intangible qualities of urban systems such as vitality cannot be forced upon a city, but it could be encouraged given an acknowledgement of the existing potentialities and then developing them. My motivation is therefore to explore what potentialities nourishes an urban situation such as a 24-7 city and if possible, to simplify them collectively as a tool set that could perhaps be able to be applied to metropolitan areas to be designed and planned, under the context of urban systems within the Netherlands.

\textsuperscript{2} Temporal grain: smallest difference that we wish to, or are able to perceive, conceive or represent while not yet designating it as ‘equality’ is … the ‘grain’ of the perception, concept or representation (De Jong, 1992:16)

\textsuperscript{3} Referred by Rooij (2005:173) as a society, in which social, economic and cultural structures are not solely determined by the shared use of certain space, but also (primarily) by the connections that an individual actor has with places, persons, or activities elsewhere.

\textsuperscript{4} Explained distinctly by van Schaick (2005:253) in comparison with Heeling, Lefebvre and Castells as an approach which views the relation between the actor and different types of collectivity and the relations between virtual and real aspects of the networks that makes up today’s society.
B2. Urban Vitality

“When we deal with cities we are dealing with life at its most complex and intense.”
- Jane Jacobs

2.1. Urban Liveliness (Jacobs 1961)

Jane Jacob’s breakthrough work, The Death and Life of Great American Cities might not be the first literature to address the issue of urban vitality, but it would surely be one of the most influential and popular. Jaco’s view of her beloved city, cultivated through her daily observations and that of her community was the essence of her book. In fact, Jacob’s believed so much in her observation that she could be found regularly protesting actions and policies that would reduce her city to a “Great Big Dullness” (Jacob 1961:144).

According to Hospers article on Jane Jacobs, Jacobs was in love with the dynamism of the city and saw it as different parts functioning like organs in a human body, inter-related elements within an urban system. Jacobs focused on the specific spatial conditions in which she observed were crucial to the city and names amongst others the concept of the small scale as well as critical mass.

2.1.1. Conditions for a healthy city

According to Jacobs, the conditions for a healthy city are (Jacobs 1961:152-221):

- Mix of functions
- Short street blocks
- Variation in residential areas
- High degree of concentration of people – supports the concepts of Compact City

Jacobs popularized the idea of planning with the concept of urban liveliness and quality of life as a concern in the face of archaic land use based planning, which is still evident in most countries today or having zoning and land use plans as a basis of spatial decision and structure. What is visible now is that there is now widespread awareness of the issue of having mixed used and combining it with street life for a quality of life as mentioned in the New Charter of Athens.

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5 Jane Jacobs is best known for The Death and Life of Great American Cities (1961), a powerful critique of the urban renewal policies of the 1950s in the United States. The book has been credited with reaching beyond planning issues to influence the spirit of the times. www.wikipedia.org


7 Critical mass is a socio-dynamic term to describe the existence of sufficient momentum in a social system such that the momentum becomes self-sustaining and fuels further growth – Wikipedia.org

A size, number, or amount large enough to produce a particular result – Merriam-Webster Dictionary.

8 The European Council of Town Planners (ECTP) charter is a vision of a network of cities, which will: retain their cultural richness and diversity, resulting from their long history, linking the past through the present to the future; become connected in a multitude of meaningful and functional networks; remain creatively competitive whilst striving for complementarity and co-operation; contribute decisively to the well-being of
2.1.2. Positioning on Jacobs

Jacobs’s views on urban vitality are a valuable platform for this research in the sense that it specifies spatial qualities and concrete examples of how a healthy, vital city will resemble or possess. That quality of a vital space is best communicated through her work and it a base for my definition of urban vitality as seen within a phenomenon of a 24/7 city.

2.2. Assessing Urban Viability and Vitality (Landry & Bianchini 1994)

As an experienced practitioner, sitting on many international commissions exploring the conditions of urban vitality, Charles Landry⁹, founder of COMEDIA advises municipalities and field professionals alike on the ins and outs of urban policy making when it addresses the intangible trinity of creativity, quality of life and culture.

The following section will be a summary of the major theoretical framework of Landry & Bianchini’s working paper on The Creative City.

2.2.1. Context and approach

Landry and Bianchini’s framework is based on constructing a set of practical guidelines or tool kit that can be disseminated to planning professionals, academia and the general public alike. Their focus on how urban vitality contributes as part of the quality of life that is necessary and nourishing for a creative urban environment. In essence, Landry and Bianchini’s theories and methods stem from an inductive observation of the current situations and trends.

Their emphasis is on encouraging dialogue on what urban vitality means, how to utilize creative thinking to maximize urban potential (Landry & Bianchini 1994:50) and cross-disciplinary approach when it comes to strategic spatial planning and balanced developments across all the urban systems.

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⁹ Charles Landry founded COMEDIA, Europe's leading cultural planning consultancy, in 1978 and has undertook several hundred projects in 35 countries around the world concerned with revitalizing public, social and economic life through cultural activity; quality of life studies; cultural industry development projects and city and regional strategies. Most recently COMEDIA has been involved in 6 major programs. They concern an international study on creative cities and creative urban milieus; the social impact of the arts; the future of public libraries and the development of the idea of the informed citizen; the role of public parks and public space; the future of the non-profit sector; the viability and vitality of cities. Regarded as an international authority on city futures and the use of culture in city revitalization; cultural planning and heritage issues, strategic policy development, the cultural industries, he also wrote the book ‘The Creative City: A toolkit for urban innovators’ was published in May 2000 to widespread acclaim. He has lectured widely in Europe, the USA, Australia and Africa and has presented over 150 keynote addresses on a diversity of topics.- excerpt taken from CV of C. Landry from www.comedia.com, 2006
Landry and Bianchini recognizes the current limitations in restricting quality of life studies to quantitative data and the need to infuse qualitative features at least into the questions asked, to get answers that can actually sketch a good picture of the “urban potential” of a place. For more detail on their methodology, please refer to the accompanying methodological report.

As a summation of their practice experience, Landry and Bianchini (1994:19) states three concepts that are crucial to the development of vitality and viability indicators which are:

- “Cultural resources” – often neglected urban potential
- “Creativity” & “Creative Thinking” – to maximize and identify urban potential imaginatively
- “Viability” and “Vitality”

For the purpose of this research, the key concept of value is that of viability and vitality, the relation between the 2 elements, their common identification and criteria will be explored in the following sub sections.

2.2.2. Viability and Vitality

**Vitality** according to Landry and Bianchini, is concerned with levels of activities (things going on), levels of use (participation), levels of interaction, communication, transaction and exchange, levels of representation (activity, use and interaction is projected outwards and discussed in the outside world) (Landry & Bianchini 1994 :22))

Whereas the relation between the 2 elements of vitality and viability is defined as:

**Urban Vitality** is defined as the set of raw materials (mass of activities, data, quantitative and qualitative characteristics of the city) which needs to be elaborated in a focused manner as a means of reaching viability.

**Urban Viability** is defined as the process of harnessing and applying creative thinking to the available resources with an eye on the trends, turning the raw materials into targets, purposes and goals. (Landry & Bianchini 1994)
Viability and vitality no longer remains as domains of economics or just culture alone, but viewed cross-platforms in terms of economic, social, environmental and cultural viability and vitality. This introduces an important concept of being able to utilize once intangible elements of the urban systems and then motivating it to make it viable and in turn add to the vitality of the place.

2.2.3. Criteria
In their working paper, Landry and Bianchini name 9 criteria which are crucial to the city which they derives from expert interviews and a wide range of sources, from politicians, professionals and the general public. Without over elaborating, the 9 criteria are:

1. **Critical Mass** – achievement of appropriate threshold
2. **Diversity** – social, cultural, economic and environmental
3. **Accessibility** – convenience and potential to utilize and generate vitality
4. **Security** – stability, perception of threat
5. **Identity and distinctiveness** – individualization in a world of homogenous globalization
6. **Innovativeness** – most direct connection to creativity
7. **Linkage & Synergy** – from within and outside the city
8. **Competitiveness** – maximize competitive edge of city
9. **Organizational Capacity** – central ingredient to identify and motivate movement of vitality forces.

2.2.3.1. Critical Mass
In the Creative City, Landry and Bianchini sees critical mass as one of the criteria, which represents a threshold either in quantity or qualitative terms.
that gives momentum for vital initiatives to be implemented. (Landry, Bianchini 1994: 32-35)

There are various ways to attain critical mass, by consolidating existing vitality resources or importing vitality from outside a city or helping local activities evolve, but that denotes a certain amount of governance and interference.

Out of the 9 criteria, the criteria of critical mass is one of the crucial theoretical underpinning for my research on 24/7 cities, it identifies as a main component to the other potentialities within the city. It is possible for cities to have various components of vitality and still not reach the critical mass which is required for it to present itself as a viable 24/7 city which is vital as well.

2.2.4. Indicators
Landry and Bianchini also includes a set of indicators, or “indices of viability and vitality” which they use as judgment on the health of a city and cover the fields of economics, social, environmental and cultural systems. The list of indicators are inexhaustible but the item of value is that Landry and Bianchini recognize that each city, can generate a specific set of indicators and although most indicators are similar along the main topics of “measuring” or for a better word indicating, given the intangible nature of elements of creativity and vitality. They usually cover the bases of demography, diversity, density, accessibility, security, identity, innovativeness, linkage and synergy, competitiveness and organizational capacity, which are extensions of the criteria that are important to Landry and Bianchini’s definition of urban vitality, but specified to take an adequate reading of a city.

2.2.5. Positioning on Landry and Bianchini
For the purpose of this research, the definitions of Landry and Bianchini are broad enough to accommodate an understanding of the term urban vitality and will be quoted as one of the possible angles of defining urban vitality in relation to conditions for a 24/7 city.

Also notable are the separation of indications and criteria which Landry and Bianchini have used, to take the pulse of the city in a way that does not just blindly rely on hard data or facts which of course could be misconstrued.
3.1. “Putting Time in the Picture” (Klaasen 2005)
This research is based on the theoretical framework of mainly Klaasen (2005:181 ff.) and Drewe (2005:197) regarding the issues of handling time within spatial planning, as it explores the possibilities of extending time usage within existing spatial conditions and also encouraging more time functions within new or restructured spatial conditions. This section will explore some of the key concepts regarding time – space related to this field.

3.1.1. Framework of Time
There has been little or no mention of time and human activity in spatial planning other than to plan for long term goals of years, if not decades (Klaasen, 2005:185). The smaller grain of hours, days, weeks and months are generally ignored as too unpredictable and minute a detail to consider, ironically, the prediction of decades is considered more within grasps of a planner. (Drewe, 2005:198)

For further consideration, this passage from Drewe (2005:199) quoting Boulin & Muckenberger, then Gwiazdzinski cannot be better rephrased:

“Why is time important? Why has it become so important that it features – at least in some countries – on the political agenda? Could it be that time has undergone significant changes that clash, with cities or space lagging behind? Has not the demand of citizens expanded and diversified, whereas the urban service supply, to a large extent still functions according to traditional rhythms.”
– P. Drewe in Time in Urban Planning and Design in the ICT Age.

3.1.2. Pattern and Process
In Klaasen’s exploration of time in spatial planning, she holds the urban system to 2 approaches, mainly that of pattern and process. This is crucial in understanding time usage within a city fabric, and touches upon the concepts of temporal grain which Klaasen also addresses. A 24/7 city is not a constantly functioning environment of systems, but systems that function in rhythms,

10 “A process is said to exist in the case of a prolonged, regular action or succession of actions that take place or are carried out in a certain manner Processes may be divided into cyclical and linear processes and cyclical processes may themselves have a linear component” (Klaasen 2004:14).
related yet separate to one another, forming a mesh of processes across the fabric which intensifies the usage of a space.

3.1.3. Temporal grain
According to Klaasen (2004:14-18), the perception of time is also a matter of scale and grain, planning timeframe is comparatively long term compared to human biological rhythms or that of a city’s rhythm. This theoretical consideration is also a basis for that of a 24/7 city where all the time grains will be overlaid on one another and forma coherent chaos.

3.1.4. Compact City
In the veins of Dantzig and Saaty (1973), who advocated a theoretically efficient model for compact city living, the wastage of valuable space in time will be accounted for, in terms of regulations, cultural and societal difference. Their value in their theory of the compact city is that it shows the possibility of living within an environment that is theoretically sustainable and advocates the advantages of judicious time-space usage.

The research is not advocating the creation of such a city, but is curious as to what conditions are existing, can be encourage within present day cities to enable a form of round the clock living environment to make full use of the resources at hands for a sustainable future.

3.2. “Du vivre en juste á temps au chrono-urbanisme” (Ascher 1997)
Ascher gave in this article a clear breakdown of the formation of time expansion and time in urbanism of cities relating to economic expansion and insatiable demands of the post-industrial society. He supports his theory with clear cut examples while relating the progression of time planning back to historical precedence. The following main lines of thoughts are highlighted for their theoretical value in this discussion.

3.2.1. Time of the City – temporalities of post industrial urban areas
Ascher (1997:113) links the push for time expansion to that of the insatiable demand for economic gain, drawing the contextual frame of globalization of economy which brings with it a demand and supply of flexible work and schedules to adapt to global requirements. This is more apparent in the post-industrial, post-production economy of present whereby the rhythm of a city is no longer dependent on just the main industry of production, but services as well

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11 Compact City – By Dantzig & Saaty, both mathematicians who put forth a concept of a city, highly efficient in all resources, that advocated multi functional usage across regular time spans regarding a city built into a plateau, that runs 24 hours around a clock, devised from a simple principle of a restaurant that needs 24 tables during lunch hour, would suffice in such a city to have only 1 table, because everyone would have lunch at different times.

12 From Les Annales de La Recherche Urbaine n° 77 March 1997. Available at:
http://www.annalesdelarechercheurbaine.fr/IMG/pdf/Ascher_ARU_77.pdf
leading to a continual push of time for the economy. This cyclical demand on labor force, leads to demand of new facilities and services time spans, which create a labor force for more services and subsequently more demand for additional time spans. The advent of telecommunications is also mentioned as an accomplice to time expansion, in allowing for capacity of extra services and an outlet for time span demands in the form of delivery services, online services which are not restricted by collective rhythms.

3.2.2. Urban Stress – Metropolitan condition of time
The concept of urban stress as related by Ascher (1997:119), points at the multiple objectives of the urban user constrained by “psychological, social and cultural, contextual conditions or events” who therefore require more mobility and multifunctional spaces to adapt. The stress of the “unpreditcability of daily events” has led to current trends of 24 hour societies in the United States and Japan for example, whereby 24 hour city is seen as a premium for time management for those who choose to manage their own time, differing from average societal rhythms. This trend is also present in Europe, with Great Britain leading the licensing laws in 2003 despite a strong traditional history to temporal regulation by the authorities, due to either strong religious or union-minded principles.

3.2.3. Scaling of time beyond traditional borders
Last but not least, an important observation is that of the upwards scaling in terms of governance and planning in present day cities. There is a breakaway from traditional territorial and administrative boundaries as more co-ordination and functionality of urban systems takes place at a regional level, thus, time is seen as another dimension to plan with, “temporal zoning” as Ascher (1997: 120-122) calls it is derived from historical references to the Citadel of an urban zone for the tradesman separate from agricultural production rhythms, creating urban permanence. In Italy, the movement perpetuated the emancipation of female labor force and trends in the United Kingdom point to creation of 24 hour zones to revitalize city centers.

3.3. Urbanism of networks
Last but not least, the backbone of this theoretical consideration is that of an urbanism of networks, so quaintly coined by Dupuy13 expounds the concept of networks in thinking about urbanism, structuring reality as a series of systems, independent yet inter-related to one another, functioning within a framework, an environment (Klaasen 2004:12). This approach, substantiates and generates the idea of a 24/7 city in terms of multiple time usage of space within an urban system.

Gabriel Dupuy is a Professor at the Institut d'Urbanisme de Paris, University of Paris, and Chairman of the Transportation, Environment, and Urban Planning Department, Ecole Nationale des Ponts et Chaussés. His work, L'urbanisme des réseaux, théories et methods (1991) is influential to the school of network thinking in urbanism.
B4. Conclusion

4.1. Urban Vitalities

4.1.1. Difference of Scale
There is a visible difference of scale between Jacob and Landry. Landry approaches the issue from the big picture, drawing up strategies to measure vitality on a city-wide, even at times regional scale and emphasizes the connection of a city and its representation to the rest of the world, and not the health of a city as an isolated case within the scale of the city’s urban fabric. Jacob on the other hand, diagnoses the city based on her local scale observations and deduces, sometimes justly from the local symptoms the bigger picture that is troubling the city.

This play on scale which zooms in on the issue from both ends is a theoretical approach which this research will seek to respect.

4.1.2. Spatial Context
Jacob prescribes actions for a healthy city based on very concrete spatial actions and statements, such as shorter blocks, textured street grain, which can be translated into an urban design without much effort. On the other hand, Landry’s approach seeks to sketch a chart on the city, which is very fine grained and thorough in some aspects, but is harder to translate into a concrete spatial design to be implemented. Note is taken of the fact that both authors advocate the combinations of all the factors to have conditions or encourage existing conditions for urban vitality.

This challenge of translating data and concepts form un-design based fields is one of the many which will have to be addressed within the research report.

4.1.3. Formal Definition
In conclusion, the working definition for urban vitality identified by this research report is that:

Urban Vitality is the life force of the city, shaped by its pre-existing conditions (spatial or otherwise), requiring a critical mass to become viable and strong.

Statements:
• Urban Vitality becomes a new competitive frontier for cities as they compete on a global scale.
• Urban Vitality is a phenomenon where the sum of potentialities is greater than their individual parts.
• Urban vitality feeds upon the viability of the potentials.
The measure of vitality is a balance between analyzing quantitative data and applying qualitative consideration to them as shown by Landry. Hence, the methodology can be consistent, but the detail defers per location and hence the need to create common ground, such as cultural basis, functional relations and geographical proximity.

4.2. Time in Spatial Planning

Conditions for a 24/7 city might seem to be unrelated to the deeper issues of time-space theories and geographers, but feeds on the existing field of knowledge regarding issues of flexible time and time expansion to actually allow for a possibility of having multiple usage of spaces within time and therefore the thread that binds the research together with time geography and sociology.

In Multi-mobility14, Ascher mentions the term of a “hypertext” society as “This hypermodern society ... generates hyperplaces. These hyperplaces are first of all spaces with n dimensions; ... places where individuals can, if they want, practise different activities quasi simultaneously in multiple social fields, and with the people they have chosen to be with, whether they are actually or virtually present. The hyperplace is a potential space, with multiple physical and social dimensions, which offers individuals possibilities for practical and relational choices.”

This term sums up the tendency that the society is developing in, in “Duizend Dingen op een Dag” (RPB 2004), the Dutch society is concluded as moving towards a more individualized society and more time is being spent on leisure activities and by multi-taskers who not just work but spend their times giving care or caring for their relations. The report indicates a future trend of 3 kinds of displacements:

1. **Fast displacement**: to get from one task/objective to another as fast as possible
2. **Concentrated displacement**: to have objectives being grouped closed to one another for maximum effectiveness.
3. **Zero displacement**: Reliance on ICT to reduce necessity for displacement for daily/seasonal objectives.

This theoretical aspect of hyperplaces with n dimensions, \( n_1 = \text{time} \), fits very well into this model of urbanism of the network society in the broader context of time. In the end, the search for urban vitality in the form of 24/7 environments is also about searching for the conditions of hyperplaces, playing the multiple dimensions including that of time to determine a possibility for the possible future as demanded by the societal rhythmic changes.

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14 Multi-mobility, multispeed cities: a challenge for architects, town planners and politicians(1) a paper presented at the Rotterdam Biennale 2005 by F. Ascher
Appendix C: Methodological Framework
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C1. Introduction

The research methodology is to approach the subject in 2 directions, first by building up a base of theoretical and methodological knowledge, to decide the best course of action to approach the subject, then by actively analyzing data relating to the subject, with a spatial emphasis. By approaching the research in 2 approaches, it became a process of zooming in and out to get a grip on the wide range of scales and context that the subject of urban vitality is involved in. This report will show the broad methodological stroke that guides the research efforts and then dive into the details of each aspect of the research and design. Please bear in mind that the report is a provisional summation of the methodology encountered and sampled thus far and will grow according to the duration of the research.

1.1. Motivation for 24/7 – harnessing urban vitality as metropolitan potential within the Netherlands

Certain urban areas are alive, vital and crucial in benefiting the social and economic structure of their cities and countries, because they have multiple life spans. They do not just shut down and go into stand by after the normal working/shopping hours. Instead they blossom and take on different facets and subsequently a different society. When we think about cities full of vitality and life spans that go beyond the normal waking hours, we think of global cities such as London, New York which are also capitals of capital, economic strength, buzz and success. Such urban systems\(^1\) make full usage of their structure and elements with continuous processes and flows (Klaasen 2005).

Spatial planning of today, seldom takes into regards the usage of space in a temporal fashion (Klaasen 2005: 181-196; Drewe 2005:197-212). Planning and design are extended within visions and expected goals, in terms of years, which however, neglect the importance of detailed planning at a finer temporal grain\(^2\), to the vitality and success of an urban area. Given the state of current urban settlements to proceed into sprawl and fragmentation, it seems highly illogical to continue using whatever precious space we have left only within a pre-conditioned notion of time. Not to mention that given the limitations of the simplified models of reality that urbanists have been conditioned to work with,

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\(^1\) Urban systems: (Klaasen 2004: 21) classifies urban systems as not only cities and urbanized regions but also parts of cities,...entities of socio-cultural, spatial-ecological, economical-technical and administrative-organizational elements, relations and processes and add that urban systems are extremely complicated open systems (Doxiadis 1968:189; Peursen 1986:57) while deducing 3 key ideas of attribute (element), structure and their inter-relation from the systems theory, which she cites (Klaasen 2004: 12) from Harvey's (1973:451) definition that a system exists of a set of elements with certain variable characteristics (attributes), set of relations between these element-attributes (structure) and a set of relations between the element attributes and the environment of the distinguished system.

\(^2\) Temporal grain: smallest difference that we wish to, or are able to perceive, conceive or represent while not yet designating it as 'equality' is ...the 'grain' of the perception, concept or representation (De Jong, 1992:16)
the element of time has barely, voluntarily or involuntarily been taken into account.

Under the auspices of the Network City studio, which studies the network society\(^3\) in terms of an urbanism of networks\(^4\) (Dupuy 1991), which relates reality as a system of networks including that of the temporal dimension, I wish to explore urban vitality in the form of 24/7 lifecycle of a city as a condition of success and well being of a urban system. Understandably, intangible qualities of urban systems such as vitality cannot be forced upon a city, but it could be encouraged given an acknowledgement of the existing potentialities and then developing them. My motivation is therefore to explore what potentialities nourishes an urban situation such as a 24-7 city and if possible, to simplify them collectively as a tool set that could perhaps be able to be applied to metropolitan areas to be designed and planned, under the context of urban systems within the Netherlands.

\(^3\) Referred by Rooij (2005:173) as a society, in which social, economic and cultural structures are not solely determined by the shared use of certain space, but also (primarily) by the connections that an individual actor has with places, persons, or activities elsewhere.

\(^4\) Explained distinctly by van Schaick (2005:253) in comparison with Heeling, Lefebvre and Castells as an approach which views the relation between the actor and different types of collectivity and the relations between virtual and real aspects of the networks that makes up today’s society.
C2. Methodological Framework

The thesis’s major methodological framework is based on Klaasen’s seminal tome, *Knowledge-based Design: Developing Urban & Regional Design into a Science* (2004) where she expounds justification of urban planning as design as a field of science and encourages a conceptual change to include multiple dimensions of time as processes within the rigid domains of urban planning.

Some fundamentals from Klaasen’s methodology which are crucial to my methodology include:

- **Reality as an open complex system**

  Reality, especially urban reality is an open complex systems made up of parts of many other systems, the identifying elements of “attributes”, “structure” and “environment” are part of the operating features of a complex system such as the urban. Hence, it is crucial to understand that the systems (legal, spatial, societal, economic) do not operate independent to each other, but within a related environment on multiple scales.

- **Selective perception: a case of the blind men and the elephant**

  A typical anecdote which very clearly illustrates the example that reality exists with or without the knowledge of users. Any attempt to model reality has to face up to the fact that the gesture in itself is always a simplification and it is impossible to replicate totality. Therefore, the research method operates from the standpoint that any data result or tool is a form generalization at best.

- **Simplification of systems**

  Models of reality are a way of objectifying and understanding reality. It is acknowledged and encouraged to separate the context of from the object in order to produce a generalization of the system. Contextual separation in the case of this research is highly necessary, given the intangibility of the subject of urban vitality. Certain issues such as the cultural background, geographical location and climate are different from all scales and levels. The differences are acknowledged and cataloged but by far, taken into consideration as separate from the object to be discovered.

- **Scientific value of theoretical models**

  Theoretical model as a tool: there is value in considering a strategic approach and theories present to justify and refine a research or design. The theoretical model is a means to an end and since processes are just as important as results, the model is therefore a tool and a process-result.

For example: Damrak, Amsterdam
Below is an exercise in identifying, analyzing and quantifying the potential characteristics that forms the indicators of a possibility for 24 hour environment in Amsterdam, in particular the area of the Damrak which is a major tourist/transportation axis leading from the central station.

A: Reality

Photos of Damrak courtesy of webshots.com users: chreddy [2006] &

B: Selective Perception

Images from: GoogleEarth[satellite]/Google.maps.nl[map]
C: Simplification of Systems

Map is reduced to a few salient details which are pertinent to the issue at hand. This starts to inform as a sort of analysis regarding the site situation.

D: Scientific value of theoretical Models - Abstraction

By abstracting the information that is present within the site and translating it into a cross between simplified reality and the beginning of a theoretical model, essential information and details are revealed and will factor into further design research considerations regarding the conditions and eventual effects of the study area and subject.

For example the axis reaching from the Amsterdam Central station towards the Dam square and various touristic areas, including the red light districts of the Wallen, Warmoesstraat and Chinatown.
By means of distillation, one can deduce a number of interesting conditions such as:

- Proximity of highly multi-modal nodes (5-6 levels of different transportation modes)
- Surrounded by public transportation routes, some of which include night buses.
- Arterial road with parallel pedestrian areas where flows of vitality and 24/7 potentials can be found
- Small street blocks which increases pedestrian accessibility and safety in large accessible public spaces.
- Possible critical mass from non-local consumer establishment, such as copious amounts of tourist accommodations within a detailed local scale.

Research by Design
By approaching design and research in the realm of practical science [Klaasen 5 2007 :3], the exploration of design gains added depth in being more than just a creative, artistic exercise but challenges the possible and probable scenarios, asking ‘what can be the case’ with ‘what conditions and effects’ by gathering scientific knowledge over the board to be applied to the design research which is as multi-faceted as they come, given the contents of human society and environment dealt with.

This is part of the principle used in approaching this thesis research. The objective being to collect as wide a range of relevant scientific knowledge in terms of literature or methodology to fuel a design for theoretical models, strategies and visual language. The understanding of other fields outside urbanism is crucial to the subject as in approaching an urban system; one must take into consideration all aspects of urban reality which is not limited to just urban structures.

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5 Adapted from ‘Perspective for developing Urban Design into a scientific activity’ – Concept draft for NORDES conference (yet to be published at time of printing)
2.1. Understanding Urban Systems

Urban systems: Klaasen (2005 : 21 ff.) classifies urban systems as not only cities and urbanized regions but also parts of cities, entities of socio-cultural, spatial-ecological, economical-technical and administrative-organizational elements, relations and processes and add that urban systems are extremely complicated open systems (Doxiadis 1968:189; Peursen 1986:57) while deducing 3 key ideas of attribute (element), structure and their inter-relation from the systems theory, which she cites from Harvey’s definition that a system exists of a set of elements with certain variable characteristics (attributes), set of relations between these element-attributes (structure) and a set of relations between the element attributes and the environment of the distinguished system.

Klaasen also states the differences in approaches, the pattern versus the process oriented, while limiting judgment on either approaches. An important difference is taking in the consideration of time as an added dimension and thereby creating a fuller view of reality as a system by approaching urban context as a 3 dimensional object rather than just a sum of separated layers.

The following tables highlight the models which are applicable to my research and hence are preferred.

2.1.1. Dynamic Reality

A dynamic reality is the nature of the object dealt with in this research; hence it becomes apparent that the methodology must also reflect the intangible, qualitative characteristics of the object, with the most important question being the functional relation in the object environment and between the differing elements.

<table>
<thead>
<tr>
<th>Dynamic Reality</th>
<th>vs. Static spatial model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space and time</td>
<td>space</td>
</tr>
<tr>
<td>Visible and invisible phenomena</td>
<td>Visible phenomena</td>
</tr>
<tr>
<td>Objects and their spatial and temporal relations: (patterns AND processes)</td>
<td>Objects and their spatial relations (patterns)</td>
</tr>
</tbody>
</table>

Fig C from Klaasen (2004:200)

2.1.2. Process Oriented Design vs. Pattern Oriented Design

The principles of process oriented designs will be reflected in the analytical instruments produced. This orientation means that the questions asked are more biased towards finding, judging and inventorining the process rather than the pattern, although, the pattern is first acknowledged and then enriched by considering the processes with priority.
Process oriented as ‘small-grained cyclic urban-societal processes with a spatial dimension’ - (Klaasen 2004:200)

<table>
<thead>
<tr>
<th>Process-Oriented Design</th>
<th>vs.</th>
<th>Pattern-oriented design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>Pattern</td>
<td></td>
</tr>
<tr>
<td>Traveling/Transporting</td>
<td>Living, Working (residing)</td>
<td></td>
</tr>
<tr>
<td>Routes</td>
<td>Places</td>
<td></td>
</tr>
<tr>
<td>networks</td>
<td>Zones</td>
<td></td>
</tr>
<tr>
<td>Accessibility, journey time</td>
<td>Accessibility, distances</td>
<td></td>
</tr>
<tr>
<td>Temporal-spatial activity pattern</td>
<td>Distance between residential function, work-residential, amenity-residential</td>
<td></td>
</tr>
<tr>
<td>Functional-Spatial – Structure Planning</td>
<td>Pattern-based – blueprint planning</td>
<td></td>
</tr>
</tbody>
</table>

Fig D from Klaasen (2004:201)
C3. Strategy

Design by Research

Theoretical Framework

Research Inventory: Analysis / Cataloging of Literature/Theories/Glossary

Methodology

Theoretical Analysis & Research

Secondary Data Analysis

Recurring Set of Conditions
- spatial
- social
- political
- environmental
- economical

Typologies

Scenarios

Visualizing

Design Tools/Instruments

Figure 1: Strategic Dual Approach to research urban vitality as metropolitan condition within the Netherlands

Legend:

Object

Concept

Concept based Object

July 3, 2007

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(Studio: Network City)
Strategy in short:
The methodology of the spatial analysis and design of this research starts with first building up a theoretical and methodological framework to have a solid basis for scientific discussion, followed by doing quick scan of policy documents and locations to identify generalization of 24/7 environments. This 1st phase is then followed by the design phase in terms of a in depth site analysis of the locations while creating a set of analytical tools and instruments to measure and judge 24/7 environments. This is then complemented with a test case of situational location, in this first instance, Amsterdam as a possible candidate for 24/7 environment related planning, to come up with a list of recommendations and judgments to the question of “What if we wanted to make Amsterdam the 24/7 city in the Netherlands? “
The last phase would be making evaluation of the framework created and the conclusions of the results generated by the structure of the research. In short, the research is not about making an urban plan for any location, but to test through design and research the possibilities, conditions and evaluate those decisions.

C4.

C5. Design by Research

5.1. Context and Scale
The subject of urban vitality is approached on 2 different scales, one of the immediate human spatial scales in terms of judgments of space and time, while on the other hand, the context of the location is judged from a regional point of view under the principle that having vital environments is very much a zero-sum game at a supra local level, whereby, if there are vital environments everywhere and only enough critical mass to support a few, these vital environments will start canceling each other out. On the other hand, at a local level, it becomes a win-win situation as 24/7 environment and activity tends to attract the user group or base that would increase demand for such similar environment or supporting services.

However, on a regional or international scale, there can be a variety of vital regions, therefore it is of great importance that on a regional scale, there is coordination and therefore the issue of the scale of location is approached from both ends.

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6 Describes a situation in which a participant's gain or loss is exactly balanced by the losses or gains of the other participant(s). It is so named because when the total gains of the participants are added up, and the total losses are subtracted, they will sum to zero. Chess and Go are examples of a zero-sum game: it is impossible for both players to win. Zero-sum can be thought of more generally as constant sum where the benefits and losses to all players sum to the same value. Cutting a cake is zero or constant-sum because taking a larger piece reduces the amount of cake available for others. Situations where participants can all gain or suffer together, such as a country with an excess of bananas trading with another country for their excess of apples, where both benefit from the transaction, are referred to as non-zero-sum. The concept was first developed in game theory and consequently zero-sum situations are often called zero-sum games though this does not imply that the concept, or game theory itself, applies only to what are commonly referred to as games.
<table>
<thead>
<tr>
<th>Terms of Scale</th>
<th>Definition by radius</th>
<th>Example</th>
<th>Amsterdam as Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detail</td>
<td>0-1km</td>
<td>Street, short blocks.</td>
<td>![Image]</td>
</tr>
<tr>
<td>Detail +</td>
<td>1-3km</td>
<td>Specific areas within neighborhood, attraction area, transportation node</td>
<td>![Image]</td>
</tr>
<tr>
<td>Local</td>
<td>3-10km</td>
<td>Streets, Neighborhoods, Districts</td>
<td>![Image]</td>
</tr>
<tr>
<td>Supra-Local</td>
<td>10-30km</td>
<td>City, Municipality</td>
<td>![Image]</td>
</tr>
</tbody>
</table>
The following section highlights the approaches sampled in identifying and clarifying the context of the research and the following objectives:
- Defining the regions concerned and the methodology used to define them.
- To sketch a context in terms of methodology, terms and background knowledge of the region used.

<table>
<thead>
<tr>
<th>Region</th>
<th>Distance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional</td>
<td>30-50km</td>
<td>Administrative Region or even provincial level</td>
</tr>
<tr>
<td>National</td>
<td>50-100km</td>
<td>National Boundary</td>
</tr>
<tr>
<td>International</td>
<td>&gt;100km</td>
<td>EU Region</td>
</tr>
</tbody>
</table>

Images: Google Earth
Distances are given a rough range to accommodate the different areas that are studied.
GaWC Check List:
- Diverse demographic
- Population
- Habitat
- Mobility
- Urbanization
- Significant financial capacity/output
- Headquarters for multinational corporations
- Financial service provision
- Employment
- City development
- Personal wealth
- Significant transport infrastructure
- Extensive and popular mass transit systems
- Significant technological capabilities/infrastructure
- Prominent, significant institutions, Research facilities, Health facilities
- Sites of pilgrimage for world religions
- Hosting headquarters for international organizations
- UNESCO World Heritage Sites
- High endowments of cultural facilities
- Sites of major international sports events
- Tourism Industry
- Site or subject in Arts and Media, Historic Reference, Showcase

This judgment criteria are varied and a mix of both qualitative and quantitative datasets. Bearing in mind that the research was carried out around the end 90s, the items of value from this research is as a thorough comparison of the city regions and especially how the Netherlands rank when compared with her neighbors both near and far.
5.1.2. NUTS

The Nomenclature of Territorial Units for Statistics (NUTS) is a geocode standard for referencing the administrative division of countries for statistical purposes. The standard was developed by the European Union, and thus only covers the member states of the EU in detail. Eurostat also devised a hierarchy for the 10 countries which joined the EU in 2004, but these are subject to minor changes. The NUTS divisions do not necessarily correspond to administrative divisions within the country. – (Eurostat 2004)

<table>
<thead>
<tr>
<th>NUTS 1</th>
<th>NUTS 2</th>
<th>NUTS 3</th>
<th>Region</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Netherlands</td>
<td>NL3</td>
<td></td>
<td>Utrecht</td>
<td>NL31</td>
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<tr>
<td></td>
<td></td>
<td>North Holland</td>
<td>Kop van North Holland</td>
<td>NL321</td>
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<td></td>
<td></td>
<td></td>
<td>Alkmaar en omgeving</td>
<td>NL322</td>
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<td></td>
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<td>IJ mond</td>
<td>NL323</td>
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<td>Agglomeratie Haarlem</td>
<td>NL324</td>
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<td>Zaanstreek</td>
<td>NL325</td>
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<td></td>
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<td></td>
<td>Greater Amsterdam</td>
<td>NL326</td>
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<tr>
<td></td>
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<td></td>
<td>Het Gooi en Vechtstreek</td>
<td>NL327</td>
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<tr>
<td></td>
<td></td>
<td>South Holland</td>
<td>Leiden and Bollenstreek</td>
<td>NL331</td>
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<td></td>
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<td></td>
<td>The Hague</td>
<td>NL332</td>
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<td>Delft and Westland</td>
<td>NL333</td>
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<td></td>
<td>East South Holland</td>
<td>NL334</td>
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<td></td>
<td>Rijnmond (Rotterdam)</td>
<td>NL335</td>
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<td></td>
<td></td>
<td></td>
<td>South South Holland</td>
<td>NL336</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Zeeuws - Vlaanderen</td>
<td>NL341</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Overig Zeeland</td>
<td>NL342</td>
</tr>
</tbody>
</table>

Table 1: NUTS category from [www.wikipedia.org](http://www.wikipedia.org)
Most of the data available, defer in terms of terminology of the actual functional urban region. The differing views include:

**FUR: Functional Urban Region**

Which is defined as what can be broadly defined as the area surrounding a major metropolitan area containing at least 1 million inhabitants and functionally dependant on the central city.

where the **CORE** of the FUR is defined as:

A minimum of 20,000 jobs and a density of 7 jobs per hectare, within a cluster of contiguous NUTS 5 (See 5.1.2) areas. FUR area determined by 10-20% of the working population commuting into the Core

Therefore the understanding that terms like the Randstad; Deltametropolis are restricted of course by the definition of where the functional urban region of the Netherlands lie and that is the contextual basis from which to operate from.

---

7 Defined by Roy Drewett (1980) as 'a nodal region consisting of two urban zones: the urban centre, or core, and a set of contiguous areas in a bounded hinterland, or ring’. Dictionary of Urbanism – R.Cowan
5.1.4. **POLYNET® Research Methodology**

POLYNET recently published a report on the polycentricity of some European regions including South East England, Rhine Main, Rhine Ruhr, Randstad, Greater Dublin and Parisian Basin. Their definitions of functional regions are the clearest to date and unbiased by political vision or planning concepts. Thus for a fair comparison basis, the determination of contextual location and region will defer to the POLYNET methodology and definition for the areas of South East England (with London as the main core and a global city), Randstad (with Amsterdam as a main core) and Parisian Basin (Paris as the main core and global city).

5.1.4.1. **Mega City Region**

The POLYNET research uses the functional relation within the Netherlands to determine the functional urban area of the “Randstad” for lack of a better name. This method is based on the relation of the centers of the Randstad which needed to have at least 20,000 jobs made up of NUTS5 units with job density of 7 jobs per hectare or more to their hinterland which supplied at least 10% of its outward bound commuters to the cores.

Given the exploration on functional relation, the determination of the area of study in the Netherlands is simplified by a set of functional data and not determined by political or conceptual definitions. Hence, this will form the elemental context of this research.

Out of the cores surveyed, it was determined that Amsterdam had the highest amount of incoming commuters and the largest commuting flow from within the larger Randstad Area.

5.1.4.2. **Policy Document Structure**

---

8 Polynet is a EUR 2.4 million INTERREG IIIB Study Project co-funded by the European Regional Development Fund and project stakeholders in seven North-West European countries. The Young Foundation is Lead Partner of the nine partner transnational project consortium. Polynet addresses a major gap in current understanding of patterns of functional connectivity associated with polycentricity and is of vital important to the operationalization of ESDP objectives for sustainable development and EU regional competitiveness in a global context. - http://www.youngfoundation.org.uk/work/research/cities/polynet
As the POLYNET research was concentrating on the polycentric regions on a national and regional basis, their choice of policy documents were of course at that scale level. To build upon their structure, additional municipality and city wide documents will also be scanned for decisions regarding urban vitality and planning trends/vision.

5.2. Secondary Data Analysis
Due to the nature and scale of the data required in this research, it is physically impossible to collect first hand data from all the different locations, organizations and systems. Hence, the data which the research is based upon, will be collected from previous scientific studies and instrumental governmental agencies as well as national statistics banks.

Data sources considered are:

<table>
<thead>
<tr>
<th>Name</th>
<th>Function</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Netherlands</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VROM</td>
<td>Ministry of Planning</td>
<td>National</td>
</tr>
<tr>
<td>RPB</td>
<td>Planning organization</td>
<td>National</td>
</tr>
<tr>
<td>DRO</td>
<td>Amsterdam Planning Authority</td>
<td>Regional/Local</td>
</tr>
<tr>
<td>CBS</td>
<td>Central Statistics Board</td>
<td>National</td>
</tr>
<tr>
<td>Deltametropool</td>
<td>Organizations with agenda</td>
<td>Case specific</td>
</tr>
<tr>
<td>Randstad Holland</td>
<td>Organizations with agenda</td>
<td>Case specific</td>
</tr>
<tr>
<td><strong>United Kingdom</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GLA</td>
<td>Greater London Authority Planning Office</td>
<td>Regional/Local</td>
</tr>
<tr>
<td>UK Statistics</td>
<td>National Statistics</td>
<td>National</td>
</tr>
<tr>
<td>TFL</td>
<td>Transport Authority</td>
<td>Regional</td>
</tr>
<tr>
<td><strong>France</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAURIF</td>
<td>Urban planning authority</td>
<td>National/Regional</td>
</tr>
<tr>
<td>Eurostat</td>
<td>Statistics</td>
<td>European</td>
</tr>
<tr>
<td>Urban Audit</td>
<td>Statistics/Analysis</td>
<td>European</td>
</tr>
</tbody>
</table>

5.3. Research Inventory
To facilitate the amount of research, a research inventory is made up, by cataloging all the relevant literature and studies read to date and analyzing them for their values in terms of:
- giving an Overview
- Analysis generated
- Methodological approach
- Theory
- Proposals for new design or theories or methods

Each item is then summarized shortly and arranged according to whether it is utilized as a related study for data or analysis, a primary literature source or a secondary source of information, for details please refer to Appendix A.
5.4. Theoretical Framework

The theoretical framework is explained in the theory report attached. For a quick summary:
The theoretical framework of exploring urban vitality, (relating to 24/7 environments), as a concept is based at firstly on the works of Landry, Bianchini and Jacobs as shown above under a wider framework of network urbanism and chrono-urbanism.

C6. Research by Design

6.1. Design Tools and Instruments

6.1.1. Urban Vitality Indicator Wheel
The urban vitality indicator wheel is made up of a rough judgment of available data, given that the data sources are never always in line with one another, since the subject navigates 3 different countries with 3 different statistical bodies, hence, the wheel is designed to give a feel of the state of urban vitality within each region/city.
The wheel is based upon 4 major criteria of
- Size/Scale
- Economy
Planning organization
- Demography
These 4 quadrants are important factors in terms of encouraging and facilitating urban vitality as a quality of life.

6.1.2. 24/7 Environments

6.1.2.1. Classification System
Conditions for 24/7 typologies are categorized based on Landry's description (2004) that all potentials need to be pre-existing. Hence, the conditions are roughly grouped into those which are pre-existing and then that which could be encouraged.

The conditions also fall under the general classification of political, social, cultural, economical and spatial characteristics; these are further divided into the 3 main natures of the conditions, whether they are context creators, situational feeders or a mix of both.
(For detailed relation, please see Appendix C)

6.1.2.2. Typologies
“Typological research compares and classifies types and determines their variants in various contexts.” – (De Jong & Engel 2005: 103)

6.1.2.2.1. Comparison
Some general observations of typical 24/7 environments are also classified according to:
- Scale
- Level of function
- Services
- Visual image for recognition.
- Space / Infrastructure required

These criteria form the basis of further comparison of the typology to aid in isolating common conditions.

---

6.1.3. **Indicators**
Further indicators which will be fully explored are (see appendix for realization):

**Critical Mass in terms of:**

- **Population Density** - inhabitants/ha to sustain alternative lifestyles.
- **Demographics** - 24/7 environments cater to mostly the young to middle age population lifestyles, is there enough of the age group to sustain the environments.
- **Ethnicity** - time span expansions is closely related to cultural differences, so variety in terms of ethnicity will encourage cultural differentiation, so there is need to determine ethnicity percentages of the area.
- **Economical Critical Mass** - an upwardly mobile society will have enough capital to indulge in leisure activities and the capability to indulge in services beyond normal time rhythms. A potentially wealthy region will also attract and allow for 24/7 environments. Hence the GDP and capita per region is also taken into consideration.

**Fig 5.1.3a: Critical Mass as indicator**
An example on how the concepts of critical mass and viability are linked in producing/creating 24/7 environments.
Accessibility

- **Multi modality** - Multi modal accessibility ensure the ease of being able to transfer between modes of transports and allowing for transport systems to supplement each other in the quieter hours. This is calculated by a survey of the number of modal steps available and minimal to a 24/7 environment.

- **Temporal Accessibility** - Currently, transport systems do not run fully at 24/7 yet, however, there are supplementary conditions allowing for unorthodox traveling time and a time wheel is used to show the possibilities and identify weak time zones, where provisions could be encouraged. Temporal accessibility also refers to transit spaces as well as the ability to pass through them.

- **Safety** - An aspect of accessibility to consider the ability to be at a space, to linger and access, hence security is taken into measure with qualitative data as to the impression of a space and the proximity to security services.

![Accessibility as indicator](image)

**Fig 5.1.3b: Accessibility as indicator**

An example on how accessibility can increase, in terms of quantity of functional relations for 24 hour environment to be viable.
Diversity

• Functions
  • Special Resources – Top locations and facilities attract and generate events which could lead to a critical mass for 24/7 environments and activities. Hence rough scans of the available cultural resources are also needed.
  • Daily resources – a good mix of resources in an area encourages 24/7 environments. The composition of functions will be explored based on the situational observations.

• Texture and Grain
  • Spatial – An urban system should possess multiple typologies of spaces to have differentiation, to allow for possibility of specialized environment. A scan of types is used as a judgment.
  • Temporal – Time rhythms of more than just 9-5 exists within any urban systems. It is the measure of the variety of time rhythms for the urban user that completes part of the grain of an urban zone.

Fig 5.1.3c: Diversity as indicator
An example on how diversity of spatial/temporal texture and rhythms are crucial to 24/7 environments.
6.2. Situational Analysis
The 4 locations as shown below are to be the used for spatial analysis to determine conditions for 24/7 systems.

<table>
<thead>
<tr>
<th>Region</th>
<th>Core</th>
<th>City</th>
<th>Basic Analysis</th>
<th>Detailed Analysis</th>
<th>Points of interest</th>
<th>24/7?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bassin Parisien</td>
<td>Petite Couronne</td>
<td>Paris</td>
<td>Les Halles</td>
<td>Georges Pompidou, Library, Touristic</td>
<td>2nd biggest tourist spot, nightlife</td>
<td>++</td>
</tr>
<tr>
<td>Rhine Main</td>
<td>Frankfurt</td>
<td>Frankfurt</td>
<td>Palais de Tokyo</td>
<td>Opens till midnight</td>
<td>New large urban project</td>
<td>-</td>
</tr>
<tr>
<td>South East England</td>
<td>Greater London</td>
<td>Inner London</td>
<td>Frankfurt (Main) Hauptbahnhof</td>
<td>Transit terminal (largest), red light surrounding</td>
<td>++</td>
<td></td>
</tr>
<tr>
<td>Randstad</td>
<td>Greater Amsterdam</td>
<td>Amsterdam</td>
<td>Central station</td>
<td>Transportation hub</td>
<td>Major entertainment hub, identified in policy document</td>
<td>+++</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Wallen</td>
<td>Entertainment district</td>
<td></td>
<td>++</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Leidseplein</td>
<td>Entertainment district</td>
<td></td>
<td>++</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Zuid As</td>
<td>Large Urban Project</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>
Legend:

+++: Documented evidence of 24/7 environments
++: Highly possible location for 24/7 environments
O: Possible candidate for 24/7 environments
-: Negative example for 24/7 environments

The above cities were chosen based on the following criteria:

<table>
<thead>
<tr>
<th></th>
<th>Global City</th>
<th>International Cultural Capitals</th>
<th>International Finance Capital</th>
<th>24/7 Policy?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paris</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, current mayor on campaign to promote 24/7 city</td>
</tr>
<tr>
<td>London</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, licensing law since 2003</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>Almost according to GaWC ranking</td>
<td>Yes, largest expenditure on arts/culture in Europe</td>
<td>Yes, known as “Bankfurt”/“Mainhattan”</td>
<td>Maybe</td>
</tr>
</tbody>
</table>
**D: Mapping the 24/7 environment**

1. **Time Spans:**

![Diagram showing different time spans for the 24/7 environment]
2. Data for 10+2+1 Cities

Quick Scan

Data Scan (for data, refer to Appendix E

- 10 Cities were chosen for similarity in economical, demographical and density structure to Amsterdam.

- Cities:
  - Asia: Singapore, Tokyo
  - America: New York (for extremely strong 24/7 activity), Toronto, Buenos Aires
  - Europe: Copenhagen, Frankfurt, Madrid, Paris
  - Australia: Sydney

- 2 special cases were taken into account regardless of similarity.
  - Johannesburg, due to the active 24/7 concept in current planning decisions, mainly due to being Host City for Fifa World Cup in 2010. A series of planning development areas were geared specifically towards 24/7 activity. Which is why the case was taken even without a strong 24/7 environment or culture for now.
  - London, the most active 24/7 concept practicing city. Due to the overwhelming amount of research present, it is chosen as a reference case and discussed more in detailed than most of the quick scans.

Quick Scan Build Up

Economic Conditions

Economy

GDP of a city is defined as the market value of all final goods and services produced within a city within a given period of time. This is considered with the GDP per capita to get a better comparison basis

- GDP (USD$)
- GDP per capita

Socio-Cultural and Political Conditions

Demographics

A vibrant city is usually the sum of a highly varied society and a youthful population, open to new experiences and new cultures. Therefore, the median age as well as the percentage of different cultures/ethnicity is considered.

- Percentage of inhabitants with minority ethnicity
- Median Age

Density

APPENDIX D: MAPPING THE 24/7 ENVIRONMENT
Cites differ in size and population, by comparing the density on 3 scale levels to get an idea of how the population is distributed within the city, metropolitan and regional limits, also indicates the quantity of concentration needed to create a threshold of critical mass.

- Regional Density (inhabitants/km²)
- Metropolitan Density (inhabitants/km²)
- City Density (inhabitants/km²)

Planning/Political Structure
All cities are governed differently, a summary of the structure and planning procedures, helps to establish the administrative and design innovativeness of the city.

- Regional Scale
- Metropolitan Scale
- City Scale

**Spatial Conditions**

Environmental Quality - Climate
- Type of Climate
- Average Temperature °C
- Average Humidity %
- Average Sunshine hours/day
- Average Wind speed (km/h)
- Average Precipitation/day

<table>
<thead>
<tr>
<th>Mode</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferry</td>
<td>0.5</td>
</tr>
<tr>
<td>Bus</td>
<td>1</td>
</tr>
<tr>
<td>Night Bus</td>
<td>1.5</td>
</tr>
<tr>
<td>Tram</td>
<td>2</td>
</tr>
<tr>
<td>Metro</td>
<td>2</td>
</tr>
<tr>
<td>Light Rail</td>
<td>2</td>
</tr>
<tr>
<td>Train</td>
<td>3</td>
</tr>
<tr>
<td>Night Train / High Speed</td>
<td>4</td>
</tr>
<tr>
<td>Access to main ports</td>
<td>4</td>
</tr>
</tbody>
</table>

Abstracting the region
The city is simplified into a fix grid, to gain understanding of the structure of the city, the location of 24/7 environments in relation to the position of major infrastructural gateways, geography and urban areas.

Public Accessibility
Based on extensive literature studies, public accessibility seems to be crucial for 24/7 environments, as most types of activities generated require the user to rely on public transportation or is expanded by the availability of public transportation, thus the city is scanned based upon the following criteria:
Density – the city is split into cells of 500m by 500m, given that the average walking speed in around 5 km/h, the cell is easily covered within 5mins from any point. The value of the cell is then determined by the amount access points within the cell.

Modality – per mode and per line available is given a grade and totals up to give the final value of the determined cell.

For example:
Modality is graded by speed, accessibility in time and distances reached.

24/7 Environment
A grid of 500m by 500m cells is applied to the city and graded for density of locations of services or businesses with operating hours outside that of the conventional hours. Any city that ranks on the global city scale or has a sufficient economy, has enough basic daily services, thus the focus is on the extraordinary times and locations to inform where the 24/7 environment hotspots might be.

Local Area
Per city has one or more locations that have a high concentration of 24/7 activities and environments compared to the rest of the urban fabric. The area is then zoomed into for a quick study on the make up of the area compared to the rest of the city and abstracted into a model to generate some set of conclusions based on the spatial arrangement and patterns.
Quick facts regarding why the particular area is successful as a 24/7 environment will also be featured.

Data Consistency
An important note to bear in mind is that as with all quantifiable data in a profession of tangible and intangible knowledge, the data collected are as accurate as humanly possible and should always be read with a margin of error and more for a general idea of the situation.

- Administrative boundaries
Due to the statistical data used, the data is bounded by the statistical boundaries of 13 different countries, of which some might differ. The knowledge is presented without prejudice and since it is impossible to judge each data set against another, they are presented in more of an informative way to sketch an ideal of a 24/7 city as much as possible.
3. **Typology**

Through the secondary analysis of 10 known cities with 24/7 environments as highlighted beforehand, 3 recurring structures can be seen with the 24/7 environment with regards to the process of the city.

All typologies can be classified into 2 scales, metropolitan and urban. Using the scale factor of 3 & 30km to represent values (1-30 km) to (30-100km) for the scales of the city, the following visual models are ways of identifying and classifying 24/7 environment morphology within a city.

**Table 3: 24/7 Typologies based on Phase 2 Analysis**

<table>
<thead>
<tr>
<th>Typology</th>
<th>Metropolitan Scale (30-100km)</th>
<th>Urban Scale (1-30km)</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concentric</strong></td>
<td>Metropolitan area with clear centre (medieval city structure), usually restricted by urban morphology (ring roads, green/water bodies) with tendency for 24/7 environment to grow around the historic/civic/commercial centre and when strong enough, environments also tend to be found in pockets outside of central zone, usually in places of high density and transport accessibility.</td>
<td>Urban area of high density and concentration of 24/7 environment (hospitals, large scale entertainment complex, transport hubs) usually offset from central zone and collects a dispersal of 24/7 activities around, usually highly connected via public transport and pedestrian zones.</td>
<td>Metropolitan: Tokyo, Buenos Aires, London, Madrid and Paris Urban: Roppongi Hills, Tokyo Victoria Station, London Chueca, Buenos Aires</td>
</tr>
<tr>
<td><strong>Grid</strong></td>
<td>Metropolitan area with grid structure, with 24/7 environment offset from the central business/historic/civic district confined within arterial transportation grids. Area within grids is highly pedestrian friendly or densely connected to public transport system.</td>
<td>Urban area fenced off by arterial grid, dense with pedestrian only access, transport modal hubs and public spaces. Fencing streets usually retail/commercial corridors.</td>
<td>Metropolitan: Singapore, Toronto, New York Urban: Downtown, Toronto Soho –West End, London Stroget, Copenhagen Shinjuku, Tokyo</td>
</tr>
<tr>
<td><strong>Linear</strong></td>
<td>Metropolitan area developed linearly along coast line or central transport axis. 24/7 environment limited by arterial roads and usually links urban centre to major node (Transport hub, other urban centre, public/civic core). Characterized by 24/7 activities within first block depth of main streets.</td>
<td>Urban area developed along main retail/commercial street. Linking 2 urban nodes together (train stations, main squares, commercial areas or harbors)</td>
<td>Metropolitan: Frankfurt, Sydney Urban: CBD, Johannesburg Orchard Road, Singapore Gran Via, Madrid</td>
</tr>
</tbody>
</table>
4. Making Heat Maps
   4.1. Spatial Data
To methodically determine the 24/7 environment hot zone within each city, a list of services, attractions and demographic data is taken into account informed by the literature research and the conditions recurring in the 12 quick scan cities.

Based on a list of industries as listed in the International standard industrial classification of all economic activities (ISIC) Third Revision (Source: United Nations publication (St/ESA/STAT/SER.M/4/Rev.3), the following industries are determined based on literature research and general knowledge to be involved with the perpetuation of a 24/7 environment within any city.

ISIC Codes:
Tabulation category G: Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods
  50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel
  52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods
Tabulation category H: Hotels and restaurants
  55 Hotels and restaurants
Tabulation category I: Transport, storage and communications
  60 Land transport; transport via pipelines
  61 Water transport
  62 Air transport
  63 Supporting and auxiliary transport activities; activities of travel agencies
  64 Post and telecommunications
Tabulation category K: Real estate, renting and business activities
  71 Renting of machinery and equipment without operator and of personal and household goods
  72 Computer and related activities
  74 Other business activities
Tabulation category N: Health and social work
  85 Health and social work
Tabulation category O: Other community, social and personal service activities
  92 Recreational, cultural and sporting activities
  93 Other service activities

From that list, the services as listed below are searched for their location and opening times.
### Table 2: Weightage of locations points

<table>
<thead>
<tr>
<th>Scale/ Effect of locations</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>International</td>
<td>6</td>
</tr>
<tr>
<td>National</td>
<td>5</td>
</tr>
<tr>
<td>Supra-Regional</td>
<td>4</td>
</tr>
<tr>
<td>Regional</td>
<td>3</td>
</tr>
<tr>
<td>Urban</td>
<td>2</td>
</tr>
<tr>
<td>Local</td>
<td>1</td>
</tr>
</tbody>
</table>

#### 4.2. Batch fixed kernel density estimator

**Hawth’s¹ Tools for Analysis**

By calculating the density of the spatially fixed locations using the ArcGIS² tool extension set of the batch fixed kernel density estimator (KDE), a free to use software extension developed by Hawthorne Beyer, the heat maps that indicate the highest density zones for 24/7 services is isolated.

---


² ArcGIS - Geographic information system tools created by ESRI allows for creation, manipulation and basic analysis of spatial data.
The batch fixed kernel density estimator works by calculating the kernel density estimate with a quartic approximation of a true Gaussian kernel function. (Beyer 2004)

The locations of each service set is translated into a set of points in a ‘.shp’ shape file and using the KDE, weighted with value regarding the nature of the locations (local, urban, regional, national or more) to a cell size of 1250m in diameter is then fed into the KDE (See Figure 2:iii Cell size action radius for locations) to the corresponding percent volume contour of (10%, 25%, 50%, 75%, 95%) to calculate the hot zones of 24/7 environment on basis of the location of services, clusters and generators. (See Figure 2:iv : Heat map based on density KDE)

<table>
<thead>
<tr>
<th>Action Radius:</th>
<th>Average Speed</th>
<th>Unit</th>
<th>Time Expectations</th>
<th>Distances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel Modes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walking</td>
<td>5 km/h</td>
<td></td>
<td>15 minutes</td>
<td>1.25 km</td>
</tr>
<tr>
<td>Cycling</td>
<td>20 km/h</td>
<td></td>
<td>15 minutes</td>
<td>5 km</td>
</tr>
<tr>
<td>Bus</td>
<td>25 km/h</td>
<td></td>
<td>30 minutes</td>
<td>12.5 km</td>
</tr>
<tr>
<td>Tram</td>
<td>25 km/h</td>
<td></td>
<td>30 minutes</td>
<td>12.5 km</td>
</tr>
<tr>
<td>Metro</td>
<td>35 km/h</td>
<td></td>
<td>45 minutes</td>
<td>26.25 km</td>
</tr>
<tr>
<td>Train</td>
<td>140 km/h</td>
<td></td>
<td>45 minutes</td>
<td>105 km</td>
</tr>
<tr>
<td>Local Roads</td>
<td>30 km/h</td>
<td></td>
<td>30 minutes</td>
<td>15 km</td>
</tr>
<tr>
<td>City Roads</td>
<td>80 km/h</td>
<td></td>
<td>30 minutes</td>
<td>40 km</td>
</tr>
<tr>
<td>Regional Roads</td>
<td>100 km/h</td>
<td></td>
<td>45 minutes</td>
<td>75 km</td>
</tr>
<tr>
<td>National Roads</td>
<td>120 km/h</td>
<td></td>
<td>60 minutes</td>
<td>120 km</td>
</tr>
</tbody>
</table>

With the basis of comparing London, Copenhagen and Amsterdam, the 3 cities are similar in that bicycle usage is either encouraged or prevalent, the user is estimated to be willing to cover the distance of 1250m by foot and is able to cover up to distance of 5km in radius by bike.

Hence the cell size is taken at 1250m and the smoothing rate at 5000m.

<table>
<thead>
<tr>
<th>Table 3: Density related to percent volume contour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
</tr>
<tr>
<td>Higher end</td>
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<td>More than average</td>
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<tr>
<td>Average</td>
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<tr>
<td>Less than average</td>
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<tr>
<td>Lower end</td>
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</tbody>
</table>
**Absolute values & Density probability estimations:**
For the purpose of the research, the density heat maps are shown in terms of a gradation of color and scale. The formulation of absolute numbers would be too precise and not understandable as the computation of radius, spatial locations to a quartic equation produces too minute and precise numbers which has can not be easily co-related to an absolute value.

![Spatial Data of London Medical Care Locations](image)

**Figure 4:i Spatial Data of London Medical Care Locations**

The locations of medical care facilities within Greater London area mapped as points in a shape file. The locations are then given a weight based on their scale effect.
Each location is calculated with a cell size of 1250m in diameter, which means the point can be accessed within easy walking distance and is calculated in relation to other points with a 1250m distance in any direction.
Using the KDE, a heat map of the density of medical care locations over the Greater London area is generated, showing where there is a highest density of locations based on the points, cell size and weightage.
APPENDIX D: MAPPING THE 24/7 ENVIRONMENT

Figure 4: 24/7 environment heatmap of Greater London
Figure 4: Density of Employment in London’s ‘Evening Economy’ (Source: ONS, CASA).

ONS: Office of National Statistic (UK)
CASA: (The Centre for Advanced Spatial Analysis, University College London)
Important terms:

**Cell Size** - An action radius for each point on the file to be taken into calculation by the KDE, in this research, a fix cell size of 500 m is taken given the distance is easily walked with the minimal walking expectation time of 5 minutes at an average walking speed of 5 km/h.

**Percent Volume Contour** - Boundary of area containing X% of the volume of probability density distribution. The 95% volume contour would include at least 95% of the points used to generate the calculations.

**Gaussian Kernel function** - function for density probability computation.

Given that the KDE is just an advanced take on the Spatial Analyst’s density estimator; the following equations attached are to give an idea as to the method behind the functions used by the program.

To create comparable densities at different locations, one usually chooses comparable distance weighting functions around each point. Mathematically, these weights are functions \( K(s,t) \) of the vector displacement \((s,t)\) of any point relative to the location \((x,y)\) where the density is computed. A population (or other value) \( f(x+s, y+t) \) located at \((x+s, y+t)\) will receive weight \( K(s,t) \) and thereby contribute a term \( f(x+s, y+t) \times K(s,t) \) to the density estimate at \((x,y)\). The density at \((x,y)\) is the sum of all such terms. (The dimensions of \( K() \) therefore are 1/area.) For this to be a true density, the integral of \( K(s,t) \) over all possible \((s,t)\) must be unity.

**Spatial Density Calculations:**

Ideally, the Gaussian kernel is
\[
K(s,t) = \exp\left(-\frac{(s^2 + t^2)}{2C^2}\right)/(2\pi C^2)
\]

In polar coordinates \( s = r\cos(\theta), t = r\sin(\theta) \), this expression is
\[
K(r, \theta) = \exp\left(-\frac{r^2}{2C^2}\right)/(2\pi C^2)
\]

The value of \( C \) determines the effective range of \( K \); points \((s,t)\) beyond a distance of about \( 3C \) barely contribute to \( K \). \( K() \) is essentially flat beyond \( 3C \). The quartic approximation capitalizes on this. The only symmetric quartic polynomial equal to 1 at \( r=0 \), to 0 at \( r=3 \), and with derivative 0 at \( r=3 \) is
\[
q(r) = (1-(r/3))^2
\]
Therefore Spatial Analyst’s "Gaussian" kernel is a multiple of
\[
K(r, \theta) = (1-(r/3C))^2
\]

Suitably normalized to have an area of 1. These values are very quick to calculate and so the density is quick to compute.

**Kernel Estimation** - estimation of probability density function

---

Appendix E: Mapping London
London
United Kingdom

51° 32' N   0° 5' W

Climate: Temperate

AVERAGE

Temperature: 13°C
Humidity: 72.8%
Sunshine: 4.0 hours /day
Windspeed: 10 km/h
Precipitation: 2.1 mm /day
Ranking 6th out of 150 world’s richest city, London is THE economic engine of the United Kingdom as well as Europe. As a command centre for the global economy, London’s success is mainly accredited to the financial and services industry. Tourism is another major engine and contributes 15 billion pounds per year.

With almost 7 million inhabitants, London has a fairly young population with a median age of 34 years old, ethnically diverse with more than 300 different languages spoken, the demographics of the city reflects on its vitality. Home to a multitude of conventional and underground cultures, the city’s busy street life and colourful neighbourhoods ensure the continuation of London as one of the major centres of the world.
Political /Planning Structure

National Scale:
Constitutional monarchy with parliament and executive agencies, that carries out legislation under each minister and government department.

Regional Scale:
SEEDA & SEERA
South East England Development Agency for overall economic regional strategy partnered with South East England Regional Assembly, which is in charge of regional planning in all facets (urban transport, housing and land use for example).

Metropolitan Scale:
Greater London Authority
Special demarcated planning, administrative, local government authority, uses theme based planning (LONDON 2012 for Olympics, London Green Grid for example), structured overall with London Plan (2004) a spatial development strategy.

City Scale:
33 boroughs
Each of the 33 boroughs, actively involved using local development schemes/framework. (For example, Islington Urban Design Guide)
Greater London

As shown by the density of employment places in the “Evening Economy” of London [Source: Planning and Managing the Night Time Economy, GLA 2004], a distinct zone of 24/7 environment is observed in the boroughs of Westminster, Camden and the edge of Islington. The rest of the activities are spread over the Greater London Area, favouring the East and North urban areas.
Abstracting London

London is encompassed within a motorway ring road, with axial branches leading into the rest of South East England. The inner ring road of A highways act as secondary access for the city. The lesser scale roads form a non grid like fine mesh, but are rather ineffectual for vehicular traffic due to the high volume and density of population. Thus, the situations of public transport facilities are the engine of mobility in London. Surrounded 4 international airports within ~60km of the City of London and one right outside the inner ring, London is served by no less than 15 modes of public transport. Subsequently, the zones of 24/7 activities are concentrated within the inner ring are those would be the next area of detailed study. The urban area finds itself within the outer ring and with the exception to the south east corner, there is an abundance of green parks within the outer ring and London is surrounded by a green belt outside the ring.
Public Accessibility
Based on public transport modality and density over a cell size of 500 m by 500m, a gradient grid of transport accessibility is produced and coincide with the zones of intense 24/7 activities. Interestingly, the area of Leicester square is extremely well served in the surrounding cells and might explain its success as THE major urban entertainment hub of London’s late night economy. The boroughs of Camden and Islington both score well due to the presence of the train hubs of Euston, King’s Cross and St Pancras. The river front scores due to the busy roundabout of Trafalgar Square bordered by the interchange of Charing’s Cross close to the riverside.

24/7 Environments
As previously noted, the intensity of 24/7 environment is related to that of public transport accessibility as well. Hubs of the West End, Covent Garden, Trafalgar Square and Camden are particularly high scoring on the gradient grid of public transportation modality and density. Unsurprisingly, these areas have the most amount of tourist trade related establishment, leisure attractions and public facilities in the central of London.
City of Westminster: Urban entertainment hub

With 4.2 million km² of public open space, 4 of the 9 royal parks and the largest concentration of tourist accommodations in London, Westminster gets 4 times as dense daily thanks to the millions of commuters and visitors. The local economy is heavily based on the leisure economy, attracted most of the visitors to London, while supporting a young and ethnically-varied local society.

As THE 24/7 environment of London, the ward of West End and St James form the cornerstone of the London night life areas of Soho and Leicester Square. At any night, an expected 38,000 people are mobile around 11pm-1am with a further 36,000 between 3-4am. The city of Westminster is the typical example of an urban entertainment hub, catalysed by generous public spaces, pedestrians’ area and extreme concentration of functions, particularly in the leisure trade.

Facts

- Density: 10,073 inhabitants/km²
- Daily Density: 45,372 users/km²
- Employment: 60% in West End Ward
- Ethnicity: 51% non-white British
- Age Group: Largest (25-29 years old)

- Hotels: 40% of all of Greater London
- Visitors: 95% of visitors to London
- F&B: 2,590 bars, pubs and restaurants
- Licenses: 200 night cafe licenses
- 427 late-night music/dance
- Casino Industry

Source: City of Westminster, National Statistics. [Facts and Figures: 2003]
Camden Borough: Seriously funky town

Famous for its Goth and punk sub culture, Camden is a young borough, with a focus on retail sector, with diverse retail location to draw the crowds. From underground markets, conventional neighbourhood centres, diamond centres to electronics and furniture, Camden has it all. The wide range of public facilities, 24/7 environments generators as hospitals and universities (student population of 11%) adds to the character of the wards. Coupled with it bordering the entertainment hub of West End and Soho, Camden is a great part of the 24/7 spaces of London. By 2015, the King’s Cross St Pancras area will be ready for the Eurostar, increasing the value of the borough as an ideal port for visitors entering the 24/7 zone of London. In comparison, Camden is 24/7 with small businesses; more locally (within UK) focused retail and entertainment boosted by its transport portals of Euston, King’s Cross and St Pancras.

Facts

- Density: 9,863 inhabitants/km²
- Daily Density: 19,726 users/km²
- Employment: 11% Full time students
  - 40% work in borough
  - 32% travel out of borough
  - 14.3% work in leisure economy
  - 9000 jobs in creative sector
- Ethnicity: 47% non-white British
- Age Group: 44% under 30 years of age
  - 73% under 45 years of age
- Facilities: University of London
  - University College Hospital
  - Royal Free Hospital
  - British Museum
  - British Library

Source: Camden Council Facts and Figures 2004
Abstraction: Westminster – Camden
The hotspot of West End, Camden and Covent Garden are typical of a square grid 24/7 environment, crossed at both ends by the major arterial roads of Oxford Circus and Charing Cross. Major transportation nodes at the crossing of each arterial and intense bus lines services along those arterials contribute to the intensity of usage within this activity zone. Stops and stations are no more than 900 m apart in each direction and the area around Leicester Square is immensely filled with public squares, parks and pedestrian only paths and spaces. These are the activity areas for the West End’s buzzing night economy and contribute as conditions for a 24/7 environment in this ward. The fine street grid and short street blocks are typical of the housing stock of the area and locate at least 5 major hospitals and countless other public institutions and tourist attractions.
Conclusions

The location of the 24/7 environment zones are coupled with the following items:
Density of public transport system and Modality (stops no more than 900m away)
Proximity of arterial traffic roads and junctions which shield off the more intimate and pedestrian friendly areas.
Dense street (pedestrian only) grids and spaces (crossing per 100-300m)
Density of leisure economy related premises
Located adjacent to the main financial and business district

Sources

Appendix F: Miscellaneous
F1. 24/7 environments

1.1. Social Trends

Drinking after work is good for your salary
10.10.06 London
A drink after work could mean a 14% bigger paypacket than a teetotaller doing the same job
Good news for those who fancy a quick pint after work - they will earn much more than colleagues who duck out to go home.
The pay packet of social drinkers is up to 14 per cent bigger than it is for teetotallers who do the same job, according to a new employment study.
While no one is suggesting it pays to be permanently drunk, a couple of drinks after the office closes can be enough to see wage rises and promotion over the stayaways and abstainers.
Drinkers may already have an advantage in many workplaces because they are usually more outgoing and gregarious and see their ability to mix well to great effect at work.
But by having a drink outside the office, they are also more likely to socialise with clients, other workers and different ranks of management - building contacts and relationships as a result.
The teetotaller, while just as good at their job, fails to build up so-called "social capital" by ducking out of the occasional after work drinking session, said the study in the US Journal of Labor Research.
Women tend to benefit more from a drink than men, according to the research by the San Jose State University in the US.
The average female worker who goes for a social drink will earn 14 per cent more than her teetotal female colleague while male social drinkers can expect to earn about 10 per cent more on average.
Study co-author Edward Stringham said: "Social drinking builds social capital. Social drinkers are out networking, building relationships, and adding contacts to their BlackBerries that result in bigger paychecks."

Is work exhausting us in a way it never did before?
LONDON, England (CNN)
Two things happened in one day that made me wonder. First, my new housemate got home just before midnight:
"Did you have a nice night out?" I asked.
"Oh no -- I didn't go out," he replied. "I've been at work since 8 a.m."
These sorts of hours are normal in the banking industry, he explains. Also, don't worry about stocking up on extra food he says; "I have breakfast, lunch and dinner at work."
That afternoon I visit a physiotherapist. My neck is so sore that it's hard to turn my head. It could be the way I'm sitting, I say. Or the fact that I rarely take breaks, or that my job doesn't take me out of the office anymore.
The physio nods. She's heard it all before. She tells me the incidents of neck and pain in office workers has soared in the past 2 years.
"Something's going on in the workforce that hasn't happened before and its making people sick," she says.
We discuss the probable causes: a move to a 24/7 work culture, more time spent at our desks due to over-reliance on email and a more contract based, short term work force that feel insecure in the workplace -- and thus less likely to take breaks.

“Everyone’s also a lot more exhausted,” she says.

Social change is easy to recognize in retrospect but in the thick of this revolution of how we work, it’s hard to know what the fall out will be. Globalization, new technology and the relaxation of labour laws have lead to changes in how we work. These changes in turn impact on our health and not always for the best.

Last year the Observer newspaper in the UK reported on the exhaustion epidemic, saying feeling tired constantly was no longer the burden of working mothers.

The article said working culture and ‘just keeping up’ with our normal workload was leaving us exhausted, stressed and leading lives that lacked balance.

They reported on a survey commissioned by Legal & General which found that 42 percent of the 5,000 people asked said that lack of sleep was their biggest health concern, followed by 34 percent worrying about low-level, general fatigue.

More than a quarter said they were stressed and another quarter admitted to depression.

Chartered Management Institute, whose “Quality of Working Life” report showed that more than half of us experience feelings of constant tiredness at work and even more of us suffer from insomnia.

Globalization, technology and the declining power unionized workforces are all social factors contributing to the feeling that work is overwhelming and never ending. It’s a Sisyphean task that promises only fleeting satisfaction because nothing ever seems quite complete.

E-mail keeps us at our desks longer, BlackBerrys may free us from our desks, but the payoff is appalling for workers. BlackBerrys tie us to work 24/7. With a BlackBerry there is no such thing as downtime.

Globalization has meant many workers particularly in finance, the media and law work across time zones. In this case, exhaustion is a very real product of the way work is now structured.

Deals done with Hong Kong are signed off at 2 a.m. London time. Deals structured in New York are signed off with the London office in the dark while the city that never sleeps, sleeps.

At Soma Health Spa in Kensington, Carolan Brown, the managing director, has noticed.

"In the city, people are on the go for longer periods. They don't sleep as well because of stress and noise pollution."

They come in for a massage to relax but even their choice of massage has a degree of self-flagellation in it -- they request hard massages when “they should be going for something relaxing.” Could it be that we are scared of switching off?

Richard Sennett in his book “The Corrosion of Character” discusses how the growing insecurity of work puts pressure on us to work harder. We are motivated by fear -- not reward.

The result is a fraying on our health. There is not an out and out breakdown, where we are carried from the office to be confined for months to our beds to rest -- instead work the modern way is a series of little deaths.

We become progressively more and more tired, we deny ourselves recovery time and the exhaustion each week etches itself a bit deeper.

Ben, a 30-year-old journalist from London, does shift work and says he regularly only sleeps 6 or 7 hours a night. The result, he says, has left him feeling “constantly tired” as if he is never quite “on.” Recovery takes place on the weekends -- but this is also when Ben socializes so “there is the constant tussle between my need to go out and get hammered and get about 12 hours sleep.”

Sharachari Maitreyabandhu, who runs meditation workshops at the London Buddhist Center, has noticed an increase in increasingly exhausted people joining the beginners’ classes. Some only make it part way through before falling asleep.
He says, "Modern life is incredibly complicated and fast -- that has a very stressful effect on the mind and body and people's quality of life diminishes. People are really busy -- they might be well off but they are unhappy."
Stephanie Driver, naturopath and manager at Jurlique Day Spa, agrees. She sees a lot of clients who suffer from exhaustion and stress.
"There are loads of complaints that are linked to stress and exhaustion -- a good 70 to 80 percent of people that I see," she says.
As well as prescribing treatments, Driver tries to look at the causes of exhaustion and advises clients to make subtle lifestyle adjustments.
"Take time out for yourself in the evening. Lots of people have a glass of wine in the evenings, but I think this causes a lot of problems. Try having a hit bath with lavender or listening to music. I advise people to try and make sure they have time for themselves. Maybe take the phone off the hook for a couple of hours."
Maitreyabandhu advises to switch off the TV even if it's just for one night.
Carolan Brown of Soma says, "We've stopped relaxing. We don't even know how to completely switch off. People work longer and longer hours and then there's the commute and so there's built-up rage. People get home and they are angry."
To overcome exhaustion she suggests being a little kinder to yourself.
"Have a relaxation massage, do pilates, create a space between home and the office where you can unwind. We know the causes of exhaustion, to be honest. Unless you change your lifestyle, there's not a pill to take to get rid of the exhaustion."
The meditation, massage and hot baths in the evening may dim the effects of exhaustion, but they won't remove the brute cause -- work. Until we change the way we work, and lower expectations of ourselves and others in the workplace, we will be forever hostage to an unrealistic set of demands on our bodies. The current thrum of exhaustion, always in the background, will start to take a serious toll on our health and well-being.
We'll drink more, be too tired to exercise, and not give our bodies time enough to recover from colds and flus. It seems that nothing short of another revolution in technology, in the way we work, and the way we re-organize our lives will free us from the ever-present feeling of fatigue.

1.2. Lifestyle & Health

Increasingly European UK embraces 24/7 lifestyle -- Critical Research

- 90 per cent agree the UK has become more 24/7 in the last five years
- 86 per cent think the 24/7 lifestyle gives them increased flexibility
- Healthcare is the service most people would like to have 24 hours a day
- A third of UK respondents were more likely to spend more time relaxing if they could

Reading, UK, August 19 /PRNewswire/ -- The 9-5 lifestyle is fast disappearing and the UK is embracing a more cosmopolitan, '24/7' way of life. According to figures(1) released today by Yellow Pages 118 24 7, 85 per cent of respondents nationwide felt that the UK's 9-5 culture was in decline. Almost 90 per cent agreed that the UK lifestyle had become increasingly 24/7 over the last five years and 86 per cent felt that this gave them the flexibility to do what they want, when they want.
Furthermore, 84 per cent agreed that the UK lifestyle was becoming 'more European' in terms of socialising habits, particularly in the North of England and Scotland. In
Liverpool, recently crowned the new European City of Culture, eight out of ten surveyed believed people were eating and staying out later than before. In Scotland this figure was nearly nine out of ten.

The survey, to investigate changing attitudes to modern lifestyles, was undertaken by Yellow Pages 118 24 7, Yell’s new telephone information service that gives in-depth classified business information and also business and residential directory enquiries 24 hours a day, 7 days a week.

Researchers also asked what 24/7 goods and services interviewees would most like to see available in their area. The most requested round-the-clock service was healthcare, with just under two thirds of people wanting to be able to contact their doctor, dentist or local pharmacy at any time day or night.

However, the results highlighted the variety of preferences for 24/7 services in different regions across the UK. Two thirds of Londoners put a 24/7 public transport system at the top of their list; by contrast, more than half of Welsh respondents wanted 24 hour veterinary services, reflecting the very different kinds of 24/7 lifestyle found across the UK.

Nick Harknett, head of marketing for Yellow Pages 118 24 7, said: “Yellow Pages 118 24 7 is designed to help people with busy lives get the numbers they want, when they want them. Our service stands out as a straightforward proposition with simple pricing; we can provide opening times, location details, prices and even cinema listings, ensuring our callers get the information they need quickly.”

Despite the increased freedom the majority of respondents felt the 24/7 way of life gave them, 62 per cent said they didn't have enough hours in the day to achieve everything they set out to do. If they could have an extra four hours in their day, a third of UK people surveyed were more likely to spend it relaxing and a mere six per cent would spend it working. These figures seem to indicate that many see the 24/7 lifestyle as more about balancing work and social life than non-stop partying - only 14 per cent would spend their extra hours socialising.

Sarah Clark, a top lifestyle coach with Open Door Coaching, thinks the shift to a 24/7 society is simultaneously creating opportunities and presenting new time management challenges.

"Yellow Pages 118 24 7's findings indicate that people today live in an increasingly 24/7 society, and I think many see this as a growing opportunity to be able to enjoy their life to the full," she said. "Whether it's working out at the gym, catching up with old friends, enjoying more holidays or taking up new hobbies, people are trying to fit as many things into their lives as possible. The 24/7 lifestyle gives us the flexibility to manage our time and tailor our lifestyle to be one that suits us."

However, the research also suggested that many people believe that there is a significant barrier to the UK becoming totally European in its drinking and dining habits; almost 70 per cent agreed that the UK wouldn't become a truly 24/7 society until UK licensing laws changed in bars, pubs and restaurants. This figure was highest amongst those interviewed in Brighton - one of the most popular UK destinations for entertainment and nightlife - with more than eight out of ten people agreeing that the UK's alcohol laws should be altered.
Note to Editors Supporting 24/7 images and Yellow Pages 118 24 7 logos available upon request.

1) Research was carried out by Critical Research in July 2003. 855 people, aged 20-44yrs, were interviewed nationwide.

Calls cost 40p per minute (billed by the second) for all directory enquiries from most landlines. Calls cost 65p per minute for all directory enquiries from most mobiles. No service connection charge.

Further information on Yellow Pages 118 24 7:

Yellow Pages 118 24 7 is a new telephone information service that provides in-depth classified business information, business and residential listings, 24 hours a day, seven days a week. More than just a number, 118 24 7 provides essential business information such as opening hours, location details, prices and special offers or even film times and summaries.

Yellow Pages 118 24 7 is provided by Yell, a leading international directories business operating in the classified advertising market through printed, online and telephone-based media. Yell's products in the UK also include the Yellow Pages and Business Pages directories, Yell.com and in the US, Yellow Book and Yellowbook.com.

24/7 lifestyle aids economy but hurts health by RICHARD SADLER

MILLIONS of workers are at risk from a new wave of illnesses linked to the modern, 24-hour lifestyle.

Doctors believe that increasing numbers of illnesses such as heart disease and diabetes are brought on by the stress of living in a world of mobile phones, non-stop air travel and relentless trading across time zones.

Professor Russell Foster, of London’s Imperial College, said modern working patterns meant more people were living out of phase with their "biological clocks" - the part of the brain that regulates the body's metabolism according to day and night-time hours.

"Human activities increasingly span the 24-hour day and we were never biologically designed to do that," he told the British Association Festival of Science, at the University of Salford.

"For example, global telecommunications systems enable financial transactions, news gathering and video conferencing to take place simultaneously many time zones apart.

"In any urban economy, 20 per cent of the population works shifts and this is likely to increase. In theory, this situation improves the output of an organization - abolishing dead time - but there is a cost with regard to human health."

A wide range of conditions, loosely termed circadian rhythm disorders or "24-7 sickness", are being blamed on modern working patterns. "Exposure to the 24-hour society has really only started happening in the 20th and 21st centuries and we are asking our bodies to do things which 65 million years of evolution have not prepared them for," added Prof Foster.

"Persistently working out of phase with internal rhythms leads to a number of disorders primarily defined in shift workers but increasingly found in other workers whose normal sleep patterns are disrupted. The most prominent of these are sleep disorders, gastrointestinal disease, increased incidence of cardiovascular disease, possibly an increase in maturity onset diabetes, more accidents on the night-shift, and social and family problems."

During the night, the body's main functions, such as the digestive and detoxification system, are slowed down and electrical activity in the brain is greatly reduced, a process which is reversed
when daylight returns. "You see the effects as soon as you go against these built-in rhythms," said Prof Foster. "The classic example of a mismatch between biological and environmental time is jet-lag. Travel across multiple time zones leaves the individual poorly adjusted to the demands of local time.

"What's happened is we've tried to fit our physiology to specific set routines but, of course, that is nonsense and by ignoring that physiology we are running into problems. "In some cases, we can over-ride our natural rhythms but we cannot expect peak performance - for example, it's been shown that people's performance in doing cognitive tasks at four in the morning is worse than if they were legally drunk."

Recent research has revealed a particular problem among night-shift workers who eat fatty fast foods such as burgers, chips and crisps late at night.

"What we're seeing is that individuals' ability to process triglyceride fats is significantly impaired," said Prof Foster. "If you have a fast-food meal in the day you can process these fats and they're not going to be circulating around the body. "But if you take it during a night-shift, it's far more difficult to get rid of - and high levels of triglyceride fats are associated with high levels of coronary heart disease." Prof Foster said that those employees who work during the night could reduce health risks by opting for low-fat sandwiches, soups and other easily digestable meals. And he added that employers should pay particular attention to conditions for night workers taking responsibility for public safety.

"The 24-hour society is here to stay with us," Prof Foster said. "We can't say that we won't have night-shifts but we can say precautions should be taken where individuals' performance is likely to be impaired."

Is Modafinil the Answer for the Sleepless?

According to Net London, this "24-hour society risks health of millions." What is the 24-Hour Society? It's a world where we can shop until midnight, find entertainment at any hour of the day or night - live, at the movie studio or on TV. A world where we can chat with friends in bars, on the telephone or online any time we choose. A world that cries out for sleep but is too busy to find time to rest.

Even the work world pays no heed to the clock. Many people toil the night away, either by choice or by demand in jobs that accomplish work in eight hour, day and night shifts. No time for sleep. Remember the old saying "All work and no play makes J ack a dull boy?" Let me paraphrase: "All work and play and no sleep makes J ack a zombie."

A news article from CTV.ca states: "The U.S. Food and Drug Administration is considering approving for wider use a drug that might help the sleep deprived stay alert and healthy." That drug is Modafinil, often used in the treatment of excessive daytime sleepiness in those suffering from narcolepsy. It was approved in Canada for the treatment of sleep disturbances in those with narcolepsy in 1990.

Dr. Diane Boivin, with the psychiatry department at Montreal's Douglas Hospital Research Center suggests that Modafinil (marketed in the US under the name Provigil) is a good drug that could help emergency workers who need to work nights and suffer from an inability to sleep during the day. But she doesn't believe it should be put to general use. Staying up to play or even work is often a personal choice, and if people wish to choose a lifestyle without sleep, then that decision shouldn't be encouraged with a pill to help deal with the
sleepiness that occurs as a consequence. What people must keep in mind, however, is that sleep deprivation is dangerous and can cause a multitude of mental and physical problems. Diseases including diabetes, heart disease and cancer flourish on the weakened immune systems of the sleepless society. Even weight loss is harder for the sleep deprived. Performance diminishes so extra hours spent at work are often unproductive. Lack of sleep causes accidents both on the job and in the home. Consider also the hundreds of accidents leading to death, injury and property damage caused by sleepy drivers.

Modafinil may well be the answer for a limited number of the sleep deprived. The rest is up to society. It’s time people recognized the dangers and disadvantages of going without sleep. It’s time to make a conscious decision and set goals to achieve the hours of sleep that give your body the chance to rejuvenate. Sleep more and live longer and healthier.

1.3. Cities

Local fare with flare, 24 hours a day - Austin, Texas
No matter where you live in Austin, chances are there’s a Kerbey Lane Cafe within a reasonable distance. The original Kerbey Lane Cafe is tucked in among a street of quaint shops in a little triangle area off 38th Street near Seton Hospital. There are also three other restaurants on South Lamar, Guadalupe, and the far North location on Research Boulevard.

All the cafes are casual, laid-back although the clientele differs somewhat based on location and the time of day. As you might expect, the Guadalupe restaurant on the Drag is often filled with UT students. It’s noisy with talk but it’s a friendly chatter that gives the place an energetic buzz. The original location is probably the closest to that “old Austin” feel. Kerbey Lane Cafes are popular spots and if you want to avoid the crowds, consider taking advantage of their 24 hour service and pop in late at night or early in the morning.

Service is decent, sometimes a little slow, so if you’re in an incredible hurry, try a fast food joint. The hours just after the bars close (2am) may see a surge in patrons, especially on the weekends. But if you’re one of that bunch, you won’t be bothered by a little rowdiness.

The food at Kerbey Lane Cafe is low to moderately priced and quite good — you won’t even realize you’re eating healthy. You’ll find locally-grown pesticide-free veggies, free range beef and pork, tasty regional, sometimes unusual entrees, breakfasts, and many vegetarian-friendly choices. The seasoned potatoes (in place of fries) are great and the pancakes and the Kerbey Queso are famous (well, at least around here). Don’t order a salad expecting the usual iceberg lettuce and cucumbers. And do read the mouth-watering descriptions. When tomatoes are in season, consider Mom’s Tomato Pie. My biggest complaint was that I got the last piece and couldn’t order more.

Berlin adds greatly to store hours - Melissa Eddy
The Associated Press
Friday, November 10, 2006

BERLIN: The German capital is taking the lead in lengthening store hours in the country by introducing 24-hour shopping Monday through Saturday and limited opening hours on some Sundays - in time for Christmas shopping.

The decision Thursday by local lawmakers in Berlin marks a sea change in Germany, where opening hours were regulated for decades by a strict federal law that limited shopping largely to
working hours during the week and only mornings on Saturdays. Most Sunday shopping was
banned by the Constitution.
The mayor of Berlin, Klaus Wowereit, and municipal tourism officials had pushed to take
advantage of recent constitutional changes that give state governments the right to set their own
store hours. Other German states are expected to follow suit.
Across Europe, laws differ vastly. In Sweden and Britain, many shops open on Sundays. Stores in
Poland can open legally, but many do not, and the Roman Catholic church has pressed for
shopping malls and supermarkets to close.
In France, the issue has wound its way through the courts, with shops seeking to be allowed to
open Sundays. Some have been obtained authorization, but practices vary widely according to
region.
Shops in Italy can be open 13 hours a day until 10 p.m. They must generally close Sundays,
though there are exceptions, including allowing shops to open on Sundays in December and to
stay open longer in tourist areas.
Under the new Berlin regulation, stores can remain open 24 hours a day during the week and
from 1 p.m. to 8 p.m. on the four Sundays before Christmas. Berlin stores can be open on a total
of 10 Sundays a year.
Not all stores are expected to take advantage when the rules take effect Dec. 1, since changes in
company practice must be approved by employee councils and some stores will likely see no
advantage in later hours.
Unions and religious leaders have opposed the changes. Margot Kässmann, the Protestant
bishop of Hannover, said on ZDF public television that "we are slowly succumbing to a collective
burnout syndrome."
Federal laws were relaxed a few years ago to let shops open from 6 a.m. to 8 p.m., Monday
through Saturday. On Sundays, nearly everything is closed.
The restrictions have helped to shield family-run businesses from competition from
multinational companies. Unions argue that they also protect workers and the quality of family
life. But retailers say that the restrictions hurt sales and drive people to neighboring countries to
shop.
Among German states preparing to change the rules in time for Christmas, populous North
Rhine-Westphalia in the west and economically depressed Saxony-Anhalt in the east plan round-
the-clock opening hours on workdays, but no change for Sundays.

**Some ?24-hour? stores are earning too much money - Copenhagen Post**
Convenience stores have become victims of their own success. Stores such as 7-Eleven are
earning too much profit outside the regular shopping hours designated by the Danish Shop Law.
The situation is forcing stores to cut back on their variety or face curtailed opening hours next
year.
The law states that stores selling only basic goods such as milk, bread and beverages may stay
open as long as they wish, including on Sundays. But these stores are only allowed to earn DKK
27.1 million annually, and many shops are now exceeding that level.
7-Eleven's administrative manager Christian Hoff says that the profit limits are at odds with the
growing demand for off-hour shopping.
‘In the five years I’ve been here, profits in after-hours purchases have risen year by year,’ Hoff
told daily newspaper Politiken.
7-Eleven isn’t the only store facing the possibility of earning too much money. Fakta Quick and
 Irma City have also seen huge profits in evening and Sunday purchases. Kim Lindal, the head of
trade organisation Danish Commerce and Services, believes there is an uneven playing field in the convenience store market.

‘On the one hand, there are limits for the big 24-hour store concepts. On the other hand, small merchants face even more competition from the big chains after the most recent changes in the Shop Law allowing them to remain open on Sundays,’ Lindal said.

Per Ørum, the Conservative party spokesperson for economic issues, explained why the profit limit was maintained.

‘Out in the rural areas, small merchants have an advantage by being open on Sundays. If we get rid of the profit limit the big chains step in. That would mean that the wonderful diversity in retail structure would disappear like in Sweden, and that would result in greater distances between the large supermarkets, to the detriment of the consumer.’

Basim Emurlahi, manager of the 7-Eleven on Town Hall Square, has chosen to limit the sales of newspaper and tobacco in order to ensure that his store can keep its promise of ‘always open’ next year.

‘It’s the first, but certainly not the last we’ll hear of this problem,’ he said. ‘Politicians have allowed us to stay open longer and liberalised the sale of alcohol. That helps to increase our sales. They’ve taken the first step, now they have to take the next and raise the sales limit or eliminate it entirely.’

**The Shop Law**

- Retailers are allowed to stay open between 6:00 am on Mondays and 5:00 pm on Saturdays. No limits are placed on how long the stores may remain open.
- Grocery stores with an annual turnover under DKK 27.1 million are allowed to open on Sundays. Sunday opening hours are 10:00 am-5:00 pm.
- Stores selling certain goods, such as bread, milk, newspapers, fuel, and flowers are permitted to remain open on Sunday regardless of their annual turnover.
- All retailers are allowed six ‘floating’ Sundays a year, where they can choose to stay open. Two of those Sundays must be in July or August.
- In addition, stores are allowed to open the first Sunday of the month and all Sundays in December.
- The original ban on Sunday trade stems from a royal decree in 1845 and was last revised in 2005.

**Shopping trends change store hours 04.07.2006 - Copenhagen Post**

Danes can look forward to 24-hour grocery stores popping up across the capital region, as well as online shopping.

The days of rushing to the grocery store before the 6 pm closing time are on their way out. Grocery stores that stay open 24 hours are making their appearance across Denmark and meeting a growing demand for flexible shopping hours.

‘The needs of people are becoming increasingly different, because of our work and the way we organise our lives,’ said Bruno Christensen, retail commerce expert with Real Institute Scandinavia. ‘As a result, the need to be able to buy groceries at all hours of the day has become larger.’

One chain of stores, Easy24, opened its first outlet in Gentofte, north of Copenhagen this spring, opening its door to consumers 24 hours a day. The chain is expecting to open 200 other locations across the country. Other established grocery chains are also moving towards having locations stay open 24 hours.
A new website, torvet.dk, which launches on Thursday, also hopes to meet the needs of consumers. The site allows shoppers to go online at any time of the night, order their vegetables and dairy products and have them delivered to their door before 7am.

‘Retailers have overslept. Consumers have a need for more options in their daily purchasing than are available today,’ said Peter Bagge-Nielsen, co-owner of torvet.dk.

Christensen noted that internet based grocery stores have previously been unsuccessful, but with 80 percent of Danish homes connected to the internet, the new site could be a success. Christensen predicts that expanding store hours will have a severe impact on those stores that choose not to follow suit.

**Students clustering in Copenhagen - Copenhagen Post 22.07.2004**

Copenhagen is attracting students like never before, but officials are bickering over who's responsible for providing enough housing.

Copenhagen is a unique Danish city, and not just owing to its status as the nation's capital. Copenhagen sets itself apart from other college towns in Denmark, because the city actually has more students than available study seats.

Frederiksberg Council, which is home to the Copenhagen Business School and Royal Veterinary and Agriculture College, has 23,000 available seats in its halls of learning, but just 9,000 students actually reside in the council. The same is true of Lyngby, home of the Danish Polytechnic University (DTU), and Roskilde, which also has its own university.

Denmark's major university towns, Århus, Aalborg and Odense have been unable to attract as many student residents as study seats.

Morten Tjørnelund, chairman of the National Collegiate Council of Student organisations (DSK) told daily newspaper Jyllandsposten that the trend was due to several factors.

“Students want to live close by their school, and central to café and nightlife. They also tend to want to live close to other students, because it's practical when forming study groups. So if students tend to cluster together, and more are moving into Copenhagen, it's a self-perpetuating effect,” said Tjørnelund.

Not just students, but young people in general are flocking to Copenhagen in droves. In just ten years, 7,200 more young people aged 20 to 29 have settled in the capital city: an increase of six percent. The number of young people in outlying regions of the Greater Copenhagen area dropped 24 percent during the same period.

Despite the trend, Morten Tjørnelund says Copenhagen has not done enough to provide adequate housing to the scores of young students.

"Young people typically move from a dorm room to a small apartment, then to a larger apartment or a house. But there are simply not enough small apartments available in the city. Many students end up stuck in dormitories for up to five years. Copenhagen Council should either do what's necessary to acquire enough housing, or come out and admit that they're not particularly interested in all these young people," said Tjørnelund.

Tjørnelund told Jyllands-Posten that although the council is expected to open up 1,600 housing units over the next two years, the figure will only add up to about 1,000-1,100 usable apartments.

"Most of these units are either co-ops, or rent for around DKK 5,000 per month, which is too expensive for students living on SU grants," said Tjørnelund.

Copenhagen University academic director Jakob Lange said the council had made strides in accommodating young people's housing requirements.

"From doing nothing at all, things are finally starting to move at the council level. The question remains, of course, why nothing was done before," said Lange.
A political row has long raged over who is ultimately responsible for housing Copenhagen's students. Mayor Jens Kramer Mikkelsen says the increase in young residents is proof that Copenhagen has shouldered its share of the burden. "The numbers aren't meant to excuse us, but they certainly dispel some myths. And we are still in the process of building even more youth apartments," said Kramer Mikkelsen. The mayor told Jyllands-Posten that Copenhagen's high population of young people was an asset, rather than a burden. "These people are a vibrant presence in the city, from leisure activities to cafés and workplaces. They're good for Copenhagen," he said.

Roskilde Mayor Bjørn Dahl told the newspaper that his council was envious of the capital's success in drawing young people. "There's nothing we'd like better than to attract more students. We'd like to build upon our identity as a college town, so that young people don't just study here, but live here as well. Young people are an economic resource," said Dahl. As far as the students themselves are concerned, it all boils down to freely choosing where they live. "Why settle for Roskilde if Copenhagen is where you really want to be?" asked Jesper Vadskær Christensen, spokesman on student living affairs at the Danish Joint Student Council.

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Danish architects won competition for a new urban area – Copenhagen Capacity
(30-05-2007) The Carlsberg site is to be a 24 hour urban area where you can live, work, study and spend your leisure time. Carlsberg’s architect competition was won by four architects who will make a densely builtup area. The young architects from the Copenhagen architect company Entasis won the international architect competition about defining the future identity and development of the Carlsberg area in Valby. The winning proposal "Our Room" proposes a densely builtup area of the Carlsberg site which will ensure that the area will be lively 24 hours a day, writes Berlingske Tidende. "When you are creating a new urban area with shops, schools, museums of art and workplaces you need to make room for a large number of people. And to procure the people, the area needs to be densely builtup. With the proposal we will have a dense urban area as we know from Copenhagen old town," says Christian Cold, owner of Entasis which received EUR 130,000 in the competition. According to the intentions of a densely builtup area, the winning proposal is based on the old maze of beer cellars which the entire Carlsberg site is built on. The patterns formed by the underground cellars will be drawn upground and according to the proposal make up the town’s space.
In keeping with the outline for the competition the winning proposal moreover suggests a sustainable urban area with solar panels on all roofs. In advance Carlsberg called for proposals, planning a dynamic urban area in which to live, work and spend your leisure time which is why group chief executive Niels Smedegaard Andersen is very pleased with the winning proposal.
On behalf of Carlsberg, the architect company Entasis will now prepare a basic plan for the area in collaboration with Copenhagen Municipality. Later a plan framework will be prepared which after a public hearing is to be discussed in the Town Council before the summer of 2008.

24/7 Cities: A Perspective From Liverpool by the Downtown Liverpool Organisation

Enthralling, exhilarating, alive, dynamic, vibrant, all terms regularly used to describe really good cities. Add 24-7, the city that never sleeps comes to mind, and the metropolitan vision is complete. Every city now, with any ambition, must have a 'strategy' to ensure that their cities are active '24-7'. Fine, but there have been some truly excruciating interpretations on what this means - and even more damming - attempts to implement and become one.

But what is a great 24/7 city? In Britain this has largely boiled down to letting the bars open through the night. If this was the case then every dour market town could now title itself as a great metropolis that never sleeps. One only has to visit any town centre in the UK of a weekend to see the serious consequences of taking a one dimensional approach to the 'Night-time' economy... a little bit of Manhattan? More like Sodom and Gomorrah!

Last year the Government launched a report 'Evening economy and the urban renaissance', but in Liverpool, sadly, it looks as if the concepts in the report have gone over the heads of policy makers in the same way that other solid urbanist advice from bodies like the Urban Task Force so despairingly have before.

In Liverpool, the domination of bars at present is in part the responsibility of the city council for being profligate with licences in their rush to be a '24 hour' city. That stilted and one-dimensional interpretation was always pretty wide of the mark. Whilst there is nothing wrong with clubs and bars etc, diversity borne of a healthy economy really is the key to providing a truly great metropolitan experience. In New York, the consummate 24-hour city, it seems that everything is indeed open day and night, except for the bars!

Whilst downtown Liverpool does have more than its fair share of activities in comparison to most other cites in the U.K. Liverpool is a big city, with a long tradition of running as such, we mustn't be complacent. As the report highlights, we are still a long way from having the type of broad based environment that we see in continental or even many North American cities In Spain and Italy the streets only start coming to life at 10p.m. when civilised activity is the norm. Football matches are often still being played at midnight and this isn't confined to just the Rome, Madrid, Barcelona and Milan as this activity occurs in towns and villages across the continent. Many small towns are much more 'vibrant' than even the biggest of British cities! Nor is it a case of the more amenable climate. Copenhagen and Oslo are as equally animated; they just dress for the weather. What makes these places hot beds of sophisticated socialising, where in Britain we tend to equate the evening with the sordid and squalid?

Recent news that a major International casino chain is interested in opening a Liverpool complex brings back to mind calls in 2003 by the NWDA (in response to the report mentioned above) for casino development to be encouraged, at the time Downtown Liverpool put out a press release welcoming the opportunity for downtown through relaxing rules about casino operation, but cautioned that this would only work as part of a wider move to diversify downtown's evening economy and leisure offer.

Casinos and other gaming initiatives can bring major investment and ongoing revenue when done correctly. They could create a new customer base for downtown and its current cultural and other attractions. For Liverpool to attempt to do a 'Las Vegas' though would just shuffle the economy over from one primary sector to another, failing to increase downtown's attractions in a way that would defeat the point of encouraging them.

APPENDIX F: MISCELLANEOUS ARTICLES AND REPORTS
Echoing calls made at the time of the Government report by Chester M.P. Christine Russell, downtown is about much more than retail of a day and drinking at night. We need to see if we can encourage other facilities to open in the evening and explore what business and new services can be provided later too.

Liverpool is a fantastic city and downtown at night has always been buoyant but we should always search for new ways of making it even better. There are tremendous opportunities for the city to encourage a more sophisticated night-time economy. The very best cities attract a hugely diverse range of users through the wide number of niche markets they cater for. Increasing the number of casinos is just one way of helping this along, but there must be more diversity.

Only concentrating on facilities themselves however, would still be insufficient. It has been plain for years now that the evening economy and environment will only mature when all needs and opportunities are considered with regards to how we develop downtown.

Major increases in population levels, (which has its own diversification needs, to cater for family living), produce opportunities [see this article on Cincinnati] that are at present woefully under-exploited, and sorting out the appallingly bad public transport links around the city centre are as important as attracting new activities in themselves.

Liverpool city centre
niche retail

Good moves have been made with regards to policing, cleansing and extending things like library opening times, we need to ratchet things up another level or two now. Also, with the internationalisation of the economy it means that many more business now can, and many need to, operate around the clock. If Liverpool is to truly return to anything like its former dominance then finance will play an essential part of this, and the financial houses never close! All of these companies need secondary and tertiary support that creates more late night workers. This is in fact another good sell for downtown as could you imagine the boredom working like this on an 'edge city business park'?

Downtown diversity has a ‘dampening’, civilising, effect on the excesses of those out partying. There is also the comfort of knowing that should you hit trouble then help is available through there being more people around. If people inclined to uncivil behaviour feel that their excess will be witnessed, ridiculed, or reported, they are likely to temper their inclination! You can only get this if there are hundreds of apartments overlooking the street, offices that are still staffed and other establishments generating ‘normal’ activity.

Building a REAL 24 Hour Metropolis

Of course, we only need to check out our own city's pre-war economy to see how a truly 24 hour metropolis, both within a leisure context as well as the general commercial aspect works...the city just never stopped! Manchester and Newcastle may now be good party cities, but Liverpool has always been Mardis Gras in comparison!

How did Liverpool function when there where tens of thousands of families living downtown, more thousands working, all whilst living in the midst of the longest and greatest Sailortown party on the face of the Earth? The important element that made it work, and continues to work in cities that still retain a genuine 24 hour dimension, was the simple fact that no one single group owned exclusivity of the public realm. The tide and the need of maritime commerce dictated the body-clock of the city, not the factory hooter or municipal paper chase!
The key to having a truly vital 24-hour city is rooted in the practice of good urbanism. Good urbanism is vital as it leads to good 24-hour cities. Mixing use is a fundamental building block of the real city. Of course, it also provides the building blocks for sustainable economic growth! Good urbanism is City building. Liverpool once was a ‘mini Manhattan on the Mersey’; As teeming, as vibrant, as complex and as exhilarating. Exploring how Liverpool can become a healthy metropolis with a strident 24-hour economy will help us to become the ‘New Manhattan on the Mersey’

Like many aspects of the downtown renaissance, evolving a more sophisticated night time or 24-hour economy will be dependent on assisting 'pioneers' who will go in and establish the structures, whilst there is only speculative or weak demand, but is essential in providing the floor to build up from.

Buildings that are capable of changing use through out the day, offering what is most appropriate, whether through the day, or into the evening and night-time ensuring that the downtown street stays alive and animated.

Traffic exclusion has an important role to play in this, as permeability helps people to get from place to place. Who the hell enjoys walking through the pedestrian 'retail zone' of Church St, once the shops are shut and the only people on the street are drunks? One of the most important pre-conditions, and one of the greatest benefits to be had from de-zoning, is generating an atmosphere of safety. If this is reached then even wider activities can be stimulated that make the environment safer still. The more people, undertaking as wide a range of activities as possible to generate is what makes for really sound 24 hour cities. Work, leisure and pleasure, leads to vibrancy, safety and wealth!

And, of course, a hefty downtown residential presence, with families making up a significant section of the numbers is an essential part of the mix.

Downtown is, of course, intimately associated with those edgy, slightly seedy and sometimes dangerous activities of the night. Unattractive personalities and underworld characters inhabit the nether world between crime and 'respectable' society. It always has, it always will. In many ways this is part of the attraction. Downtowns give the chance to witness all facets of society, without having to become involved, though there is always the danger of getting dragged into something. Again, part of the excitement!

These activities take place in the most celebrated cities too. It is downtowns unique ability to be able to accommodate many different activities and groups in a common area whilst retaining their own exclusivity.

A 24-hour city economy is about much more than allowing the bars to open throughout the night...much, much more!

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http://www.downtownliverpool.org

The independent, not-for-profit urbanist think tank for Liverpool, UK.

**OpenCities Notes: Creating A 24-Hour City | June 28, 2007**

OpenCities was a weekend-long unconference that took place on the 23rd and 24th of June. Many excellent conversations came out of the weekend, and this is one of them. You can read notes from the rest at [OpenCities.ca](http://www.opencities.ca).
The late Jane Jacobs asserted that a great public space should attract different people for different reasons at different times of day. Why, then, have we forgotten the last part in our planning—and our thinking?

Torontoist and the OpenCities participants agreed that Toronto is not, in fact, a 24-hour city. In almost every neighbourhood, we decided, there is a point after which the streets are literally deserted, and in most places, buying or doing anything becomes impossible. This is in stark contrast to some of the examples offered, such as New York's Union Square where there are just as many hundreds of people sitting, playing, eating and breakdancing at 3 a.m. as at 3 p.m.

What was difficult to agree upon, however, was what would be necessary to spawn a 24-hour culture, and therefore a 24-hour city. Would the ability to buy goods 24 hours a day create the push needed to bring people out of doors in the middle of the night? Would a 24-hour transit system get people out? Perhaps not—Nuit Blanche was completely free (and transit options remained the same) and it persuaded people to postpone their bedtimes. (It is worth noting, however, that this year's Nuit Blanche may see part of the Yonge-University-Spadina line running 24-hours for the first time ever.)

Some excellent suggestions came out of the conversation, though: to truly create a 24-hour city, we need to stop stigmatizing the hours after dark as a "dangerous" time, namely by abandoning the under-16 midnight curfew, opening up public space to people of all ages at all times of day (or night). The worry that "we wouldn't want six year olds running around alone at night" was quickly answered with "we wouldn't want six year olds running around alone in the daytime either!"

Extending last call was also proposed, which was met with unanimous support.

A plan of action was formed, and it was agreed that we'd need to start with a directory and map of all the 24-hour locations in the city, and add more as we asked our local businesses if they would consider staying open. That directory, we realized, already exists, or can, in the form of Torontopedia, using its Google Maps capabilities. The idea of a project called Bloor24 was also proposed, in which Bloor Street store owners would be asked to stay open 24-hours for the first night of Spring.

How would you, Torontoist readers, create a 24-hour city?

Photo by Kieran Huggins on Flickr

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**APPENDIX F: MISCELLANEOUS ARTICLES AND REPORTS**

**Planners and police surrender city centres to Britain's Mass Volume**

*The Independent, The (London), Jul 17, 2000* by Ian Burrell Home Affairs Correspondent

THE REPORT makes a mockery of any pretence that Britain is trying to create a cafe culture. It also makes grim reading for Home Office ministers, already resigned to a gloomy set of crime figures being released tomorrow morning.

The government-backed study by experts at Durham University found that an emerging pattern of allowing large numbers of late-licence bars and clubs to be clustered in a single street has driven up violent crime by 106 per cent in two years in one area.

It points out that the number of applications for new drinking licences is running at more than 3,000 a year, an increase of 38 per cent since 1995. By 2002 there will be an estimated 238 million nightclub admissions a year, against 142 million in 1993. The police, who have had no corresponding increase in resources, have handed control of the night-strips to private doormen, the report finds. "In the absence of the police,
who could not contend with the expansion of this economy and the violence and disorder that accompanied it, the void was filled by private security in the form of bouncers."

On a typical Saturday night in Nottingham, where the bars around the Lace Market draw people from all over the Midlands, 30,000 people are being overseen by a dozen police officers on public-order duty and about 400 door staff.

Fred Broughton, national chairman of the Police Federation, said: "Policing in these areas is to a large extent in the hands of the doormen.

Advertisement

"There is a feeling now that the situation is out of control. Ten years ago we were in charge of these areas and did not tolerate people running around drunk and fighting. We arrested them."

Mr Broughton said officers on public-order duty had no option but to mediate with violent groups because making an arrest forced them to return to the police station, leaving colleagues isolated.

The Durham study traced the explosion of the night-time economy to attempts by Britain's great industrial cities to attract new investment by repackaging themselves as regional centres of entertainment. Bar and club scenes, which had been largely underground, were identified by councils as important promotional tools in attracting visitors and boosting economies.

The large breweries were quick to spot opportunities for themselves, flooding the new fashionable districts with their own chains of late-night themed bars.

As word spread, tens of thousands of visitors began flocking each weekend to Manchester's Gay Village, Liverpool's Concert Square, Newcastle's Bigg Market, the Exchange Quarter and Boar Lane in Leeds, George Street in Hull and Broad Street in Birmingham.

But as Jane Ellis, the city centre manager in Nottingham, pointed out, many of the new night-time centres have become "victims of their own success", attracting "more people than the set-up can cope with".

In the two decades to 1998 the number of pubs and bars in England and Wales has risen by 16 per cent to 78,000, the number of nightclubs by 25 per cent to 4,000 and the number of licensed restaurants by 44 per cent to 30,000.

Figures due out next year will show an even greater rise in licensed premises as former banks, shops and cinemas are converted into bars.

The pub and club industry has a declared turnover of pounds 22bn, with some bars packing in 2,500 people at a time and making pounds 3m a year.

The huge profits at stake are spreading the night-strip trend across the country as councils seek to use the leisure industry to put smaller towns on the map.

The Durham study, led by the criminologist Dick Hobbs, said: "Regional power is now located by asking `How many nightclubs?' and whether the city has a JD Wetherspoons or a Piano and Pitcher."

But city centre managers such as Ms Ellis, who are anxious to achieve a "balanced mix" of eateries, comedy clubs and bars that cater for differing age groups, find brewers are interested only in the 18-25 market, where the most profit is to be found. She said: "This is also the age group where you get the problems of public disorder."
The youngsters who dominate the "night-strips" are known as MVVDs - mass volume vertical drinkers - because they are encouraged to stand in large groups, swigging from bottles. MVVD drinking requires neither comfortable furniture nor staff to wash glasses and pull pints. But this "swig culture" also leads drinkers to move quickly from one bar to the next, swamping door staff with large groups of inebriated and impatient youngsters often carrying bottles of high-alcohol drink. Ms Ellis said: "Commercial developments have encouraged a style of drinking and culture that was unheard of years ago."

The patterns have caused concern at the Association of Town Centre Management, which has commissioned research on "Managing the Evening Economy" ahead of government plans to relax the licensing laws further. Cities such as Manchester and Liverpool have moved to pass by-laws which give the police powers to confiscate bottles and glasses being carried on the street to prevent them being used as weapons. In Wolverhampton, where it is claimed that the new Entertainments Quarter has reduced crime since the days when the town centre was deserted at night, private security staff ride the night buses. In other towns, door staff are hired to work in restaurants, takeaway shops and hotels as the number of people on the street at night continues to grow.

But the Durham researchers predict problems with government plans to establish a national authority to regulate door staff. They found many bouncers were employed by front-men acting for "criminal interests". One firm was being run from within a prison wing. In one city no door-staff licences had been revoked in three years, despite 42 bouncers facing allegations of assaults. The report calls for police to be allowed to take control of all licensing, regulation and training of door staff. It also says police must be given a greater say in the planning of the night-time economy and that councils need to make greater efforts safely to disperse the crowds, providing more night buses, taxis, toilets and catering facilities.

F2. **Context: Netherlands**

2.1. **Social Trends**

**Churches rally against the 24-hour economy – MARIANNE GRÜNELL**

In June 1998, churches in the Netherlands began a campaign against the "24-hour economy", claiming that this phenomenon damages the well-being of society. They have asked the Government not to wait, but to take immediate action. The initiative received both support and criticism. However, research indicates that today's "stressed society" is not a result of the 24-hour economy but of the way in which people live their lives.

In June 1998, churches in the Netherlands joined forces in a campaign against the so-called "24-hour economy" (24-uurseconomie). The campaign began by nailing seven propositions to the door.
of the Second Chamber of the Dutch Parliament and presenting a petition with 750,000 signatures in support. In these propositions, the churches claim that the 24-hour economy has adverse effects on people's biorhythms, health and "collective experience of time". People are becoming more socially isolated, it is claimed, whilst the reproduction of social norms and values is in danger, as are church services. In short, the churches allege that the 24-hour economy makes people "the slave" of economic motives. While the churches refer to a "collective rhythm" bestowed on creation - the neglect of which will lead "people to not only lose sight of God, but also of each other and themselves" - other arguments against the 24-hour economy are well-known and more generally accepted.

**Slaves to the economy?**

Specifically, the churches are worried about the following developments. A third of the Dutch labour force works irregular hours, whilst a quarter sometimes works at night. Banks and temporary employment agencies now often provide a 24-hour service. Bonuses for irregular working hours have disappeared. Trade unions have to struggle during collective bargaining to prevent people from being forced to work on Sundays. In the service sector, the willingness to work in the evening and on Sundays is becoming a new selection criterion. Furthermore, the longer opening times of shops in the evening and on Sundays threatens to make Sunday a "normal shopping day". More and more, it is claimed, the Netherlands is sacrificing itself at the altar of the economy.

The churches criticise the philosophy accompanying the 24-hour economy - whereby "standing still means going back" and the prevailing tendency is towards "more, more and still more" - as hype, adding that it leads to cultural deprivation, a decrease in social cohesion and large-scale health problems for people who cannot keep up the pace. A third of all new disability benefit (WAO) claims are the result of psychological complaints. The churches feel that collective leisure time - which is good for people's biorhythms, health and recuperation - is a collective good and should therefore be protected collectively. They argue that the economy should exist within the culture because without cultural norms, an economy will eventually turn on itself.

The Minister of Economic Affairs was the first to react to the campaign. In a statement, he officially opposed designated times of rest, and favoured the freedom of the individual to choose these moments for themselves. The Minister rejected the pressures of the economy and said that employers and employees determine their own work schedules. He also rejected the "09.00 to 17.00" economy, still the pattern of half of all employees, and pointed to the popularity of extended opening times: more than 60% of the public now sometimes do their shopping in the evening, and 40% sometimes on Sunday. The Minister stated that stress has more to do with the fact that double-income families and single people now make up the majority of households: only 27% of households are now "single-breadwinner" families. Legal arrangements have been slow to adapt to this development. He acknowledged that the government can play a role in this respect by expanding childcare facilities, improving leave arrangements for care, and extending opening hours. This way, care and work can be combined harmoniously on a day-to-day basis. According to the Minister, the government should give people the room to fulfil their personal needs as much as possible.

**Facts and figures**

Is the Netherlands really on its way to becoming a 24-hour economy? Experts and researchers deny this. Here are some facts and figures: in 1975, 13% of all employees in the Netherlands worked in the evening or at the weekend. Currently, the figure stands a little over 14%. In 1955, 160,000 employees worked a full continuous shift - exactly the same as in 1997. In addition, the working week has been shortened from 48 hours in the 1950s to the present 36 hours. Put differently: in 1970 employees worked an average of 1,800 hours a year, while this decreased to 1,370 hours in 1996. In a recent study on trends in working patterns, the researcher Kea Tijdens
concluded that although “the edges of the working day” have expanded in recent years, a 24-hour economy is nowhere in sight (“Zeggenschap over arbeidstijden. De samenhang tussen bedrijfstijden, arbeidstijden en flexibilisering van de personeelsbezetting” [“Involvement in setting working hours. The relationship between company hours, working hours and the flexibilisation of staff”], Kea Tijdens, Serie Wetenschappelijke publicaties Welboom, The Hague (1998)).

The social partners have certainly played their role in developing a more flexible economy. In 1993, the bipartite Labour Foundation spelled out its so-called “new direction” for collective bargaining, in which decentralisation and flexibility were accepted in terms and conditions of employment, in exchange for a collective reduction of working hours (NL9710137F). In 1996, a “flexibility and security” accord was signed in the Foundation, exchanging further collective reduction of working hours for further flexibility (NL9706116F). In private sector bargaining, these initiatives resulted in specific collective agreements being reached over the 1994-7 period. However, different sectors have different needs. In industry, for example, “just-in-time” production has become a central concern, whilst extended opening hours are more important to commercial services. Furthermore, although the collective reduction of working hours is highly valued by employees, flexibility is less popular (although the advantages of less traffic congestion accompanying a nine-hour day and a four-day working week are recognized). The president of the Christian Trade Union (Christelijk Nederlands Vakverbond, CNV) feels that the churches’ slogan “Against the 24-hour economy” is a somewhat unfortunate choice; he would have preferred the secondary slogan “More time to live”. This is, in his opinion, the real reason why the campaign drew so much support.

**Commentary**

The churches’ action shows how Christian ideology clashes with liberal ideology. This confrontation was reflected in the headlines in the press, such as “social cohesion is no concern of the market” versus “long live freedom of choice”. The question that remains is whether this debate addresses the heart of the matter. In all probability, it is not so much working patterns that cause today’s stress, but the fact that both partners work in many of today’s households. In addition, there is a growing group of single people who have no choice but to combine work and care. Together, couples now work more hours than the single breadwinner did in the 1950s. Consequently, the organization of the household and caring activities has become more complex, especially when children are involved. Furthermore, there is a growing “active free time culture”: French cooking classes for father on Tuesday, aerobics for mother on Thursday, whilst the children need to be taken to their music lessons on Wednesday and their swimming lessons on Friday. In short, people conduct a wider variety of activities simultaneously. Once viewed as raising the quality of life, this lifestyle has to be re-evaluated. Stress relief is now a common diagnosis and it is becoming clear that people should be doing this themselves. Seen in this light, the 24-hour economy does not appear to play a decisive role. (Marianne Grünell, HSI)
The 24-hour economy not widespread – Peter Smulders

Some 74% of workers in the Netherlands usually work standard hours, while 15% normally work at weekends, 14% in the evening and 4% at night. Weekend work is frequently carried out by younger people. The sectors most associated with weekend work are: policing, nursing and elder care, hotels and restaurants, agriculture and retail. Overall, it appears that the 24-hour economy is not yet widespread in the Netherlands. About 40% of all employed Americans work mainly in the evening or at night, on rotating shifts or at weekends, according to an article by Harriet Presser in Science magazine. The article looked at the reasons for the prevalence of non-standard schedules in the United States and predicted further growth in the near future. The underlying premise is that the move towards a 24-hour economy is significantly altering the nature and stability of family life.

Up to 1996 in the Netherlands, the law governing the hours of trading was the most restrictive in the European Union. In that year, the government decided that shops could be open from 6 am until 10 pm. Local government authorities were allowed to decide whether shops could open on Sundays. As a result of this change, churches in the Netherlands began a campaign against the 24-hour economy, claiming that it would damage the well-being of society. The initiative received both support and criticism at the time (NL9807189F).

Working time patterns

In 2000, 2002 and 2004, the TNO Work Situation Surveys (TNO Arbeidssituatie Survey (TAS)) interviewed a representative sample of the Dutch workforce (4,000 employees and self-employed people). The workers were asked to indicate, for each day of the week, whether they normally work in the morning, afternoon, evening and/or at night. On the basis of the data from 2002 and 2004 (NL0601SR01), it may be concluded that 74% of employees normally work during or part of the standard working week - day time, Monday to Friday. About 15% normally work during a part of the weekend, 14% on one or more evenings, and 4% one or more nights.

Analysis over a longer period reveals that the actual working week has shortened from 48 hours in the 1950s to the present 33-34 hours. On the other hand, business hours in the Netherlands have gradually lengthened. Companies now open to staff and customers/clients for an average of 56 hours per week (Fouarge et al, 2001). Business hours are longest in health care and transport, and shortest in education, construction and manufacturing. Nevertheless, a Dutch study on trends in working patterns concluded that although ‘the edges of the working day’ have expanded in recent years, a 24-hour economy is not prevalent (Tijdens, 1998). Recent data from TNO concur that the 24-hour economy is not yet widespread in the Netherlands.

Working hours and overtime per week in the Netherlands, 2004 (%)

APPENDIX F: MISCELLANEOUS ARTICLES AND REPORTS
In 2004, the average Dutch employee worked about 33 hours per week. This is relatively low in a European perspective. However, overtime work (paid and unpaid) is - at seven hours per week - quite common. The figure above illustrates that the longest hours are worked in the road transport sector, where employees work 47 hours per week and another 17 hours per week in overtime. Part-time work is common in the retail sector, nursing and elder care, post and telecommunications, and in hotels and restaurants. Employees with permanent contracts and self-employed people usually work standard working hours. Non-standard working hours are typical among temporary agency and on-call workers.

Weekend work is often carried out by younger people. As noted, about 15% of all Dutch workers normally work during the weekend. However, about a quarter of all workers in the 15-25 age group work during weekends. This percentage is much lower for older workers (see Table 1). The same age differences are found with respect to evening work. On the other hand, night work is mostly carried out by workers in the 36-45 age group.

<table>
<thead>
<tr>
<th></th>
<th>Weekend</th>
<th>Evening</th>
<th>Night</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-25 years</td>
<td>24.7</td>
<td>18.2</td>
<td>2.1</td>
</tr>
<tr>
<td>26-35 years</td>
<td>15.7</td>
<td>17.0</td>
<td>5.7</td>
</tr>
</tbody>
</table>
Table 2 identifies the industrial sectors in which weekend work is most common.

<table>
<thead>
<tr>
<th>Industrial sectors</th>
<th>Working during the day in weekends (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Policing</td>
<td></td>
</tr>
<tr>
<td>2. Nursing and elder care</td>
<td>36.0</td>
</tr>
<tr>
<td>3. Hotels and restaurants</td>
<td>29.4</td>
</tr>
<tr>
<td>4. Agriculture</td>
<td>28.8</td>
</tr>
<tr>
<td>5. Retail</td>
<td>28.1</td>
</tr>
<tr>
<td>6. Culture, sports and recreation</td>
<td>25.1</td>
</tr>
<tr>
<td>7. Post and telecommunications</td>
<td>20.2</td>
</tr>
<tr>
<td>8. Road transport</td>
<td>16.4</td>
</tr>
<tr>
<td>9. Hospitals</td>
<td>15.9</td>
</tr>
<tr>
<td>10 Car sales and repairs</td>
<td>14.2</td>
</tr>
<tr>
<td>Average for Netherlands</td>
<td>15.3</td>
</tr>
</tbody>
</table>

The sectors where people work most often at weekends are policing, nursing and elder care, and hotels and restaurants. Conversely, people seldom work at weekends in public services (specifically government departments), education, financial services and banking, and construction.

Thus, for most sectors in the Netherlands, the 24-hour economy is not an issue. Nevertheless, police officers, nurses, cooks, waiters, farmers and shop assistants do work in a 24-hour economy. It must be said, however, that this is not a new situation since it relates to the nature of the activities carried out in those sectors.

Peter G.W. Smulders, TNO Work and Employment, Hoofddorp

2.2. Policies
2.3. Amsterdam

In the Heart of Sin City

By Daniel Schwammenthal | Feb 2, 2007 | 1037 words, 0 images

AMSTERDAM--When a Belgian politician called the Netherlands a "cesspool of sin" in 2005, Dutch Foreign Minister Ben Bot knew that his country could no longer be blasé about its libertine reputation. Not when its southern neighbor, usually the subject of many barbed jokes here, was laying claim to the moral high ground. So Mr. Bot gathered his ambassadors around him and told them to go forth and counter the "foreign press caricatures" of the Netherlands.

That's a tough job when the facts paint a rather bizarre picture. Holland has legalized prostitution and euthanasia, and it tolerates the use of soft drugs. The state makes sure that children as young as 12 receive sex education, and contraceptives if they want them. Little wonder that two years after Mr. Bot's softer-image offensive, the stereotype of the average Dutchman is still that of a pot-smoking dude who visits an underage prostitute just before pulling the plug on his mother's life-support machine.

Having recently moved to the capital of this "cesspool," I've seen a very different picture. The Dutch don't strike me as a bunch of post-moral, ultra-liberal hedonists. On the contrary, they're rather ordinary, even conservative, folks. The Netherlands is a country where people wash their cars on weekends and lovingly place garden gnomes in their flower beds. How immoral or uninhibited can a society be where not one but three Christian parties vie for votes and a popular proverb, basically the national motto, translates as "Act normal, that's crazy enough." Acting "normal" doesn't include indulging in any of the legalized vices, either. The society that taxes away extreme disparities in wealth also frowns on extreme behavior.

To unmask the Dutch conformist behind that anything-goes facade, I recently explored Amsterdam's notorious Red Light district at night. "Yeah, sure," some readers might be thinking now. But let me reassure them (and my fiancée) that this was a legitimate, journalistic assignment: penetrating the heart of sin city for evidence of Dutch guilt, or--as it turned out--innocence.

My gaze (seriously, honey) never fell on the women displaying themselves in the windows and focused solely on the other passersby. My experience seemed to confirm what locals had repeatedly told me: Ordinary Dutchmen might visit the bars and restaurants in this neighborhood, but they are not the ones thronging the narrow alleyways to look for sexual gratification. I heard many languages spoken as I strolled the reddish gloom but rarely any Dutch (and a stray local on the prowl is likely to be as furtive, and afraid of public contempt, as any upstanding burgher). Every person I asked for directions turned out to be a tourist.

In a nearby coffee shop the experience was similar. The patrons were almost exclusively foreigners. Coffee shops, for those unfamiliar with the local euphemism, may also serve coffee but usually only as a side order to the main course: cannabis. For the record, I neither smoked nor inhaled--only dutifully reported. Also abstaining would seem to be the average Dutch citizen.

So, what accounts for the strange existence of rather mainstream moral codes amid centers of lust and psychoactive substances? Paradoxically, while Dutch policies might be liberal or libertarian in effect, they derive from a fairly paternalistic, conservative instinct, mixed with a good dose of pragmatism. That pragmatism goes back at least to the 17th century, Holland's Golden Era as a great seafaring power. In those days, the country was a Puritan stronghold. But even the pious Dutch, who offered the Mayflower Pilgrims a temporary home, acquiesced to Amsterdam's emerging Red Light district. Early on, this nation of world traders concluded that it...
couldn't stop the world's oldest commerce. Yet then, as now, many of the prostitutes' clients were foreigners; mostly sailors in the old days, mainly tourists today.

The modern Dutch consensus is that making outlaws of prostitutes and soft-drug users only pushes them underground and into the hands of real criminals. Better to control and regulate such behaviors by legalizing--or in the case of cannabis, tolerating--the otherwise objectionable.

The Dutch word for this is *gedogen*, which has no equivalent in English yet roughly means permitting what is officially illegal.

The Dutch hope that this approach will let authorities focus on fighting serious crimes, such as the forced prostitution of human trafficking, and allow soft-drug users to hang out in places where they aren't so likely to bump into dealers of more dangerous narcotics, like heroin. The added bonus--this is still a nation of traders after all--is that once brothels and marijuana cafes are legal, you can tax their profits.

Practicality is sometimes taken for licentiousness. Yet the Dutch don't offer sex education and contraception at an early age as part of a social experiment to promote or condone teenage sex. They are simply attempting to regulate the inevitable, or at least what's believed to be inevitable.

The euthanasia law is in another category altogether, since it grew out of a conviction that it is morally right to allow patients to end their own suffering. But here, too, the Dutch also saw a need to be realistic, by codifying and regulating what was already taking place in hospitals and homes without rules and supervision.

Some statistics seem to show that the Dutch are on to something with their approach to the baser human desires. The Netherlands has one of the lowest drug-related death rates in the industrialized world and far fewer abortions or teen pregnancies than in comparable Western societies.

And where gedogen doesn't seem to work, the Dutch are willing to stop looking the other way for a minute and fine-tune their policies. Late last year, Amsterdam authorities began legal proceedings they hope will close down about 30% of the windows in the Red Light district, where owners are suspected of using the sex business as a cover for money laundering.

On closer inspection, it turns out that a lot of the finger-waggers and other outside critics are mistaken. The Netherlands isn't so much a cesspool of sin as it is a well of pragmatism. Even if, it must be said, that pragmatism attracts a whole lot of sinners.

Mr. Schwammenthal is an editorial writer for The Wall Street Journal Europe.

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Amsterdam plans station PPP project

*International Railway Journal, April 2005*

THE City of Amsterdam is leading a 2.5 billion [euro] public-private partnership project called Zuidas to redevelop the Amsterdam South station area as part of the HSL South high-speed rail link to Rotterdam and Belgium. The city council and the Dutch government are expected to make a final decision by the end of this year or early in 2006.

The project will involve placing the existing railway and parallel highway underground for a distance of 1.5km and developing the area above for commercial use. The new underground station will have six mainline platform tracks plus an adjoining underground light rail station. A company would be set up to implement the project. The private sector would have a 60% holding in it. The promoters believe that the South station area will be highly attractive to developers because it will have excellent rail links, not only to Amsterdam and Schiphol Airport, but also to many other destinations in the Netherlands, Belgium and France.
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