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Symphonies of Urban Places: Urban Rhythms as Traces of Time in Space. A Study of 'Urban Rhythms'

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Abstract : Temporality is a fundamental characteristic of urban places. An attribute of nature, people and space, place-temporality consolidates and emerges out of their dynamic relationship in urban space. Temporality is place-specific and a result of compounds of urban rhythms at a particular location. This paper understands the concept of 'urban rhythms' and demonstrates its value within urban socio-spatial disciplines, specifically those concerned with urban *place* design. It starts from developing on both general and specific notions of rhythms, specifically on musical rhythm and everyday life rhythm. It follows elaborating upon the particular notion of 'urban rhythm', its characteristics and various types of representation in city space. Lastly, it focuses on the relationship between urban rhythms, senses of time and senses of place, elaborating on the impact of place rhythms, the sense of belonging and character of urban spaces. This paper proposes a new perspective of analysing and thinking urban *place*; a rhythmical and temporal perspective that concentrates on places' inherent repetitious dynamics. This perspective adds a new layer of understanding to the typically addressed urban elements/processes within spatially concerned disciplines.

_Introduction

Temporality is ubiquitous and principal characteristic of urban places. As both localised (represented) and experiential (lived) time, temporality is suggested and expressed through complex forms of rhythms. Temporality is thus rhythmically perceived and represented in urban places. In urban places, temporality is experienced as attribute of nature, people and space and emerges out of their dynamic relationship. Nature, people and space are in itself rhythmic elements and their relationship takes the form of rhythms.

Urban rhythms are both everyday life and spatial rhythms. One can recognise rhythms everywhere in human activity and life in urban places. In this context, rhythms take concrete forms. Everyday life rhythms are social, natural and physiological/biological regularities. Structuring our social time, social rhythms are event regularities or irregularities in the form of linear sequences of activities. Natural, physiological patterns take the form of cyclical regularities, and condition social and individuals' behaviour in space. In addition, spatial rhythms are both dynamic and static. They involve movement or the perception of movement as suggested by bodies/objects or surface patterns in space.

These rhythms interact and mingle, adjusting to each other, and originate bundles of rhythms characterising everyday social-spatial environments. Urban places are polyrhythmic fields, compound of several everyday life and spatial rhythms.

Everyday life and space are in itself a rhythmed organisations. The study of rhythms in daily life spaces perceived in the form of regular temporal patterns of events/activities/practices in interaction with natural and biological cycles, and suggested through movements in space delivers important insights on questions of everyday urban life, and in particular to the understanding of society in places.

There are two core characteristics of rhythms, they embody time and they are place specific. In contrast to other social sciences times such as lived time, measured time, work time, leisure time, social time, and so on, which are mainly addressed outside spatial context, rhythms are concrete times which can only be perceived in space (Lefebvre 2004: 1-69). Rhythms in spatial context involve interactions between people, and interaction between people and spaces, which react to displaced objects and morphology of the spaces. These are superimposed by natural rhythms, like cyclical changes of nature as seasons, day and night cycles, varying weather conditions, and so on. Social, spatial and natural rhythms together influence, shape and characterise everyday life in urban environments and are responsible for the perception of time in places and feelings of identity. In this context, urban rhythms nurture senses of time and place. This in particular is significant for the understanding of urban places, with rhythms as traces of temporality influencing the character and perception of identity. The analysis of urban rhythm offers a new mode of observing and understanding places, with great potential to analysis, quality assessment and design of urban spaces.

In this context, the study of urban rhythms becomes a challenge for urban-space analysts in the search for thorough understanding of what are urban places and how do urban places work, adding a valuable layer of knowledge on what so far has been considered in urban place studies. Urban rhythms are temporal attributes of urban space, suggesting temporality has most important attribute of space to be taken into account when thinking and evaluating, and addressed when designing urban spaces.

This paper is divided into three main parts. The first part concentrates on both general and specific notions of rhythm aiming for an understanding of its main characteristic, how it may be perceived and visualised in space. It starts by looking at general notions of rhythm followed by more specific notions such as musical rhythm and everyday life rhythm; additionally, it informs on three other concepts, polyrhythmia, eurhythmia and arrhythmia, drawing on rhythmic conditions and relationships, complementary to the notion of rhythm. The second part, the core of this study, draws

on the notion of urban rhythm; it tries to understand and suggest what urban rhythms may be, which form they take and under which categories. At this point, this paper suggests urban rhythms as a compound of both everyday life and spatial rhythms. Thirdly, it opens discussions on urban rhythms has influential factors of sense of time (temporality) and sense of place (identity and character of urban places). At last, this paper proposes *urban rhythms* as new mode of analysing and thinking about urban places, which can complement conventional approaches to urban problems in everyday professional practices.

_1. Notions of rhythms

Rhythms are everywhere there are people, nature and space, and it is most often spontaneously experienced and manifested. People naturally and empirically acknowledge the notion of rhythm, everyone believes in the ability of mastering and possessing its content (Lefebvre 2004: 5). However, individual views on rhythm vary significantly. Notions of rhythm differ subjectively according to individuals' personal interests, activities and expertise in their daily lives. Musicians tend to define rhythms in close relation with the notion of beat and measure, while historians and economists attach rhythms to the notion of cycles and eras and gymnasts relate it rather to closed sequences of aerobic movements. Rhythms in everyday life are subjectively perceived and may take multiple forms.

The notion of rhythm is also defined and studied in different ways and contexts. They take forms according to different disciplinary perspectives and related to distinct notions of time. In this way, notions of rhythm may be addressed more abstractly, taking physical and physiological perspectives, relating it to notions of physical time and experiential time, or take more specific and tangible forms, within music and biology, relating it to musical or natural biological times.

In the absence of a general theory of rhythm with precise definitions, this section looks at different notions of rhythm, brought about by different sources and perspectives with the aim of understanding and mapping its main attributes, and of searching a general framework of what may be understood as rhythm. It starts with general concepts of rhythm and proceeds to more specific ones such as everyday life rhythm and musical rhythm. The main attributes and principles, according to which rhythm maybe perceived in space, are essential focus of this preparatory study.

Rhythms

General notions of rhythm assume several aspects. Firstly, from a physical and sociological point of view, rhythm is defined abstractly as regular recurrence ('recurring at regular intervals'), or as 'movement with a regular succession of strong and weak elements'; and furthermore as cycle, an interval during which recurrences occur, or in other words as regular 'recurring sequences of events'. Secondly, from a linguistics point of view, rhythm (speech rhythm) is 'the arrangement of spoken words alternating stressed and unstressed elements' or as 'measured flow of words and phrases in verse or prose determined by various relations of long and short or accented and unaccented syllables.' Thirdly, from a biological point of view rhythm is realised through various forms of biorhythms, which form base of human body experience from heartbeats, breathing rhythms to menstruation cycles in women. And more generally the *Oxford English Dictionary* defines rhythms as a 'harmonious correlation of parts.' (CSLPU web glossary, Oxf. Dictionary)

The first definition illustrates how rhythms may be understood and recognised in social and physical spaces. In socio-spatial environments rhythms are represented by the notion of (a) regular recurrences (regular repetitive sequence of events), (b) movement through a regular succession of elements, (c) patterns characterised by accentuated succession of elements, (d) the cycle as an interval of sequences of events and (e) a harmonious correlation of parts. Similarity, regularity, succession or sequence, alternation and accentuation are attributes of social and physical rhythms and processes through which events manifest themselves in space. Movement (or the feeling of movement) is suggested by these repetition processes of event durations. Rhythm is either linear recurrence or cycle of events and movement suggested by various repetitive processes of event durations.

The latter definitions are representative of the idea that the human body is in itself rhythmical and producer of rhythms. Linguistic and biological rhythms are influential and refer to the everyday life environment. Linguistic rhythms are the key in the process of production of social space and biological rhythms are a vital reference in the awareness (consciousness) of personal, social and physical space.

(Musical) Rhythm

The notion of rhythm as feature and manifestation in musical time is one of the most significant in people's minds, on which other more general notions of rhythm and in other domains, i.e. in everyday life social and spatial environment, intimately depend and relate to. Musical rhythm is a concept that most people perceptively share and understand, and offers key reference in the understanding of rhythms more generally..

In musical studies, rhythm is defined as 'the whole feeling of movement in time, including pulse, phrasing, harmony, and meter' (Large, Palmer 2002: 2). Yet from a cognitive science perspective, musical rhythm is more commonly described as 'the temporal patterning of event durations in an auditory sequence' (Large, Palmer 2002: 2). As suggested here, rhythm entails a symbiotic relation between movement (or the feeling of movement), the beat and a metrical structure - the feeling of movement according to a beat, with identifiable metrical structure. The feeling of movement is provided by the succession of event durations and periodical accents; beat involves' pulses which mark equally spaced points in time, either in the form of sounded events or hypothetical (unsounded) time points'; the metrical structure is defined in musical theory as 'an alteration of strong and weak beats over time' (Large, Palmer 2002: 2). Furthermore, rhythm entails phrasing and is also perceived, structurally, as temporal pattern. Rhythmic configuration phrasing is generated by the periodical repetitive and alternating motives, the combination of accents and note duration, a mode of expression and sensitive generator of meanings. As temporal pattern, it is shaped by a periodical and repetitive succession of event durations and/or accents. While discussing 'rhythm and music,' Henri Lefebvre explores both the idea of rhythm as phrasing and as temporal pattern: he refers to musical rhythm as both lologenic and pathogenic (parallel terms of expression and signification), in other words, rhythm produces meaning and emotion (Lefebvre 2004: 58, 63). furthermore he refers to the notion of rhythm as rhythmic structure and the idea of metric as the one that delivers rhythm (Lefebvre 2004: 60-1).

From this brief consideration on rhythm as aspect of musical time, significant characteristics of rhythms emerge, which enrich the more general definitions from the previous section. Movement (or

the feeling of movement), beat and meter (measure) are inherent characteristics of rhythm, and event durations and accents are primary elements that combined through processes of succession, periodicity, and alternation, create a distinct shape in rhythms. Rhythms also entail phrasing that denotes it as a mode of expression (code), as catalyst of meanings and emotions; further it can be perceived as a temporal pattern of event durations.

(Everyday life) Rhythm

Lefebvre, a major source in the study of everyday life rhythms in cities, discusses in his work *Rhythmanalysis: Space, Time and Everyday Life* (2004) the general attributes of (everyday life) rhythm. In relation to musical rhythms, he presents three major interdependent attributes of everyday life rhythms: repetition, measure and movement. There is 'no rhythm without repetition in time and in space, without reprises, without returns, in short without measure' (Lefebvre 2004: 7ff). Repetition is an essential attribute of rhythm, yet it is indissociable from the attribute of movement: 'For there to be rhythm, there must be repetition in a movement' (Lefebvre, Régulier 2004b: 78). Furthermore, measure, the third main attribute of rhythm is suggested through either recurrent or cyclical repetitions. Though it is perceived naturally and spontaneously, rhythm has an identifiable measure 'composed of speed, frequency, and consistency' (Lefebvre 2004: 8-9). In fact, repetition in a movement, recurrently accentuated with more or less intense event durations, according to a specific metrics offer a framework of rhythms and hunches of how to trace and perceive rhythms in everyday life urban space.

Lefebvre sets up the main principles, guidelines in the analysis of rhythms: 'For there to be a rhythm, strong times and weak times, which return in accordance with a rule and law – long and short times, recurring in a recognisable way, stops, silences, blanks, resumptions and intervals in accordance with regularity, must appear in a movement' (Lefebvre, Régulier 2004b: 78). Also, 'rhythm presupposes: a) temporal elements that are thoroughly marked, accentuated, hence contrasting, even opposed like strong and weak times; b) an overall movement that takes with it all these elements (for example, the movement of a waltz, be it fast or slow)' (Lefebvre, Régulier 2004b: 78). Lefebvre, furthermore, writes that there is a rhythm 'everywhere where there is interaction between a place, a time and an expenditure of energy' (Lefebvre 2004: 15).

Polyrhythmia, eurhythmia and arrhythmia

Lefebvre's *Rhythmanalysis* includes also the study of rhythmic fields/environments, and seeks an understanding not only of single rhythms, but also of the forms of their interaction. Notably, rhythms are relative to each other; they may only be perceived in relation to other rhythms. Lefebvre writes: 'A rhythm is only slow or fast in relation to other rhythms with which it finds itself associated in a more or less vast unity' (Lefebvre, Régulier 2004a: 89). In addition, one must consider 'the plurality of rhythms, alongside that of their associations ... or reciprocal actions' (Lefebvre, Régulier 2004a: 89).

In this context, the notion of rhythm requires 'complementary considerations', namely on the notions of polyrhythmia, eurhythmia and arrhythmia (Lefebvre 2004: 16). Polyrhythmia is the overlay and superimposition of multiple rhythms. In polyrhythmia, bundles of rhythms intermingle and interact with each other, and, as result, form complex rhythmic fields. Our body and the complexity present

in urban environments are examples of polyrhythmic fields.

In everyday life, cyclical and linear rhythms are superimposed on each other, forming complex polyrhythmic ensembles within an 'antagonistic unity of relations' though giving 'rise to compromises, sometimes to disturbances'(Lefebvre 2004: 8). There are further to other notions which chracterise two basic modes of interaction between rhythm: eurhythmia as symbiotic relation and arrhythmia as disruptive. Eurhythmia is a harmonic and symbiotic relation between rhythms and ensemble of rhythms. It happens when '[r]hythms unite with one another in the state of health, in normal ... everydayness' (Lefebvre 2004: 16). Arrhythmia is a 'pathological state' in which rhythmic fields suffer disruptions/disturbances; a case of rhythmic disruption or catastrophe' (Lefebvre 2004: 16). These two modes of interaction are typical rhythmic conditions one finds in complex polyrhythmic fields, i.e, everyday life/environment, our own body, and others, when trying to isolate and study rhythms, like continuous streams of cars on the road, or the disruptive accident that changes the symbiotic interaction.

Summary

Rhythms are everywhere in everyday life environment, and are spontaneously and subjectively perceived and defined. Individual views on rhythm are subjectively dependent from personal interests, and expertise in people's daily lives. Rhythm is also differently defined through different disciplinary perspectives, and is attached to different notions of time.

Generally, rhythm is acknowledged as a regular repetitive sequence, or as patterns of periodically accentuated elements, or as a cycle – intervals of sequences of elements/events, or as harmonious arrangements of parts. Such arrangements of elements/events, whatever their form, should always suggest movement. These examples of rhythm denote that that there are two main different sorts of rhythm: linear and cyclical repetitions. Furthermore, harmonious arrangements of elements may also be considered as rhythms. Moreover, regularity, succession, sequence, periodicity, alternation and accentuation are all attributes of time and rhythmic variations of repetition of elements in space. The latter, together with the elements being repeated, characterise rhythms and make them particular. Besides externally perceived rhythms, the individual body is internally rhythmic and produces rhythms, as in language, music, expression of one's participation in cultural everyday life.

Musical rhythm is acknowledged as temporal pattern of event durations. As found in general notions of rhythm, succession, periodicity and alternation are the main attributes, which provide distinctiveness to rhythms. But musical rhythm suggests that not only movement (or feeling of movement) is a distinct characteristic but also beat and measure. Moreover, not just events or elements as suggested before, but event durations and accents greatly characterise rhythms in general. Finally and most importantly, rhythm entails phrasing, which denotes it as mode of expression *(code)*, a catalyst of meanings and emotions.

Following Lefebvre in the context of everyday life, rhythms have three main indissociable attributes, as suggested before in repetition, measure and movement. Rhythms are perceived spontaneously, though they have identifiable measure composed of speed, frequency and consistency, in other words regularity. The measure of rhythm is suggested through the linearity or cyclic repetitions as well as through the various other forms of repetition, succession, accentuation and so on.

Rhythm implies, strong and weak and short or long beats/events durations/elements, which repeat in an identifiable manner – regular stops, silences, blanks, resumptions, intervals – appearing in a movement. Lastly, rhythm takes place everywhere where there is interaction between a place, a time and an expenditure of energy.

Finally, one must consider that rhythms both generally, and most importantly in everyday life, are relative, and join and interact together in polyrhythmic ensembles. In polyrhythmia, the overlay and superimposition of rhythms, two distinct conditions appear: eurhythmia, when rhythms interact symbiotically, arrhythmia, when rhythms experience disruption.

From this review two important issues are worth noting. First singular rhythms embody aspects of (localised and experiential) time, and second, rhythms are relative and interact with each other as constituent of everyday life. This connects to the second chapter: the notion of urban rhythms. Rhythms as inherent elements of everyday life can be perceived in urban spaces. Ensembles of everyday life are distinct from place to place, and interact and are constrained by the local (rhythmic) spatial setting. An urban place in this context can be understood as a constellation of particular and distinct everyday life and spatial rhythms.

2. Urban-rhythms

[Rhythm] is found on the workings of our towns and cities, in urban life and movement through space. Equally in the collision of our natural biological and social timetables, the rhythms of our bodies and society, the analysis of rhythms provides a privileged insight into the question of everyday life. (Elden 2004: viii)

In contrast to rhythm in general, urban rhythms are specific to urban context. 'Urban' offers specificity and location to rhythms; it is frame, condition and context. 'Urban' entails urban life concentrated in spatial context. Urban life is intense and inter-related social and human activity (society and being), and urban spaces are dense and complex man-made/artificial spaces. These particular socio-spatial conditions make urban rhythms an outstanding field of rhythm studies.

Urban rhythms can be perceived and experienced in urban context. They are specific to cities, thus urban places. The concentration and superimposition of social and human activity, overlaid by forces of nature and constrained by man-made spaces, makes urban places an exciting context to study a broad variety of urban rhythms.

Proposition: urban rhythm as everyday life rhythms and spatial rhythms

Specific to urban environments, urban-rhythms are a compound of two sorts of rhythms, *everyday life rhythms* and *spatial rhythms*. Both everyday life and space are rhythmic organisations. Everyday life rhythms, are social, natural and physiological/biological regularities. As discussed in the first section, they are linear and cyclical regularities, ordered sequences of socio-spatial practices referenced in clock time, in dialogue with external natural, natural circadian and circannual changes, and biological internal rhythms of bodies. These everyday life regularities interact and

intermingle in space, in itself a complex of rhythmic spatial arrangements. Spatial rhythms can be classified in rhythmic spatial patterns of two sorts: dynamic and static. Dynamic spatial rhythms involve objects that move in space with particular speed, frequency and regularity. These spaces/bodies/objects are perceived moving in relation to the (still) observer. Static spatial rhythms involve objects and surface patterns displayed in space that are still, yet evolve as rhythms from the perspective of the moving observer.

Urban places are polyrhythmic fields and compound of everyday life rhythms and rhythmic spatial patterns. They are also principal 'spaces of representation' in the city and thus overlaid by codified specific and disruptive activities that add rich complex layers to the rhythmic fields of these spaces.

Lefebvre and Zerubavel vs. the study of urban rhythms

These notions of everyday life and spatial rhythms, as urban rhythms suggested in this paper, are anchored in the studies of both Eviatar Zerubavel (1981) and Henri Lefebvre (2004). Both authors researched on rhythms of society in everyday life. More specifically, the former concentrates on the temporal regularity of everyday life, identifying various regular patterns which constitute and influence daily life. In particular, Zerubavel concentrates on the 'temporal structure of social organisation' (Zerubavel 1981: 3). The latter focuses on both the concept of rhythm and rhythmanalysis, in search for principles and guidelines for the understanding of rhythms of everyday life in the city.

Both authors contribute categories of rhythms, which although not specifically targeting urban space and inherent rhythms, are useful ground for gaining an understanding of urban rhythms, of what urban rhythms are and under which form they be perceived in urban places.

For Zerubavel 'the world in which we live is a fairly structured place', and one perceives our environment a certain degree of ordeliness (Zerubavel 1981: 1). He shows that this ordeliness is represented through numerous temporal patterns.

Drawing from within sociology of time, Zerubavel argues that everyday social life is rhythmically structured according to 'mechanical time' in sociotemporal orders, in parallel to other physiotemporal naturaltemporal and biotemporal orders.

These temporal orders produce temporal patterns, expressed through specific temporal regularities (rhythms), and he describes them as following:

• a) Physiotemporal regularities (physiorhythms) may be 'lightning under thunders ..., duration of flights of projectiles ..., day' or night ..., 'period during which the sun completes a rotation on its own axis,' or 'a planet completes a revolution around the sun,' and so on. The physiotemporal order 'regulates the movement of physical bodies'; its patterns 'lie in the domain of the physicist and astronomer' (Zerubavel 1981: 2).

• b) Biotemporal regularities (biorhythms) may be 'sequential relations among the stages of being a larva, a cocoon, and a mature insect ..., fixed duration of pregnancy periods ..., puberty within life cycle ..., uniform circadian rhythms that govern body's temperature', and so on. Biotemporal patterns 'lie in the domain of the biologist' (Zerubavel 1981: 2).

Both physiorhythms and biorhythms have predictable times, or rather are predictable times.

• c) Sociotemporal regularities (sociorhythms) are divided in four sorts: First, rigid sequential structures, which are inflexible sequential structures in social behaviour, i.e. people go to work in the morning, go to the corner sandwich shop at lunch and home in the evening, people always meet on Friday after work for a beer in pubs. Second, fixed durations, which are themselves specific durations which one associates with particular events, activities and practices of our daily life. Certain durations correspond to certain events, which for instance regularly repeat over time, and actually many events an practices are expected to have a particular timing, i.e. concerts take no more than two hours, a movie takes around one and a half hour, work meetings a maximum of two hours; in a park, when people sit to relax, they stay at least fifteen minutes (Zerubavel 1981: 4-5). Third, standard temporal locations, which are fixed sequences of events, activities or practices with expected duration. Both the sequence and duration of the event is spontaneously lived as part of social structure behaviour, i.e. routine daily activities, and particular times of the day and days of the week: lunch time, dinner time, break at 11:00, cleaning days, normatively prescribed hours to go to work, eat, meet friends, go to concerts, and so on (Zerubavel 1981: 7-9). Fourth, uniform rates of recurrence, which are recurrent activity patterns. They take the form of social cycles of activities and events, social cultural rhythms and periodicities (Sorokin 1941), and are responsible for the appearance of rhythmicity in daily life (Zerubavel 1981: 9-13).

These social temporal regularities are 'regular patterns of associated social events and activities', ways in which social rhythms manifest itself in space. Social temporal regularity implies 'the rigidification of social situations, activities and events.' These constitute 'binding normative prescriptions,' regulating the structure and dynamics of social life (Zerubavel 1981: 2), which are reflected in the use of urban spaces.

Lefebvre also develops, yet differently, categories of everyday life rhythms. In addition to the study of rhythm *per se*, he refers to manifold groups of rhythm which one finds in everyday life in cities. Overall he divides everyday life rhythms in three broad groups: 1) repetition of movements, gestures, action situations and differences; 2) interferences of linear and cyclical processes; 3) life-times, i.e. birth, growth, peak, then decline and end (Lefebvre 2004: 5–18).

Yet during his further study he concentrates on two principle categories of rhythm: cyclical and linear rhythms to which all other everyday life rhythms, secret, public and fictional rhythms, codes and rituals, 'of the self' and 'of the other', relate to (Lefebvre, Régulier 2004a: 95ff).

• a) *Cyclical rhythms*. The cyclical may be 'processes or movements, undulations, vibrations, returns and rotations' (Lefebvre, Régulier 2004b: 76). They are of cosmic, worldly or natural. They are of two kinds: 1) social organisation in big and simple intervals, like historic

recurrences or birth and death, or 2) alternating recurrences with short intervals, such as day and night, seasons and years, tides, solar and lunar rhythms, or hours or months, and so on. The cyclical rhythm has fixed frequency or periodicity and always begins again, and the numbering systems 'best suited to it are duodecimal' (Lefebvre, Régulier 2004a: 90).'. Cyclical rhythms 'are perceived favourably' (Lefebvre, Régulier 2004b: 76).

- b) *Linear rhythms.* The linear is composed of sequences of monotonous 'actions and of movements' (Lefebvre 2004: 8), or 'series of identical facts separated by long or short periods' (Lefebvre, Régulier 2004b: 76). These rhythms are 'imposed structures', originating from social practice, in general human activity; they 'emanate from human and social activities and particularly from the motions of work.' They are further 'defined by consecutiveness and the reproduction of the same phenomena, identical or almost at more or less close regular intervals.' They include 'lines, trajectories and repetitions measured on a decimal base.' Lastly, as opposed to cyclical, linear rhythms are described 'as monotonous, tiring and even intolerable' (Lefebvre, Régulier 2004b: 76; Grönlund 1998). Lefebvre has studied further groups of rhythms that intensely characterise temporal everyday life in cities, athough separation is not always distinct and some fall in either the cyclical or linear categories.
- c) *Secret, public and fictional rhythms.* Secret rhythms, public rhythms, and fictional rhythms are three categories concerning the secret and public, the external and internal domains of everyday life. Secret rhythms are physiological and psychological rhythms, recalled and memorised; public rhythms are social rhythms, i.e. calendars, fetes, ceremonies and celebrations, or other sorts of rhythms declared and expressed, i.e. digestion, tiredness, etc.; fictional rhythms are verbal or other expressive rhythms, such as through elegance, gestures and learning processes.
- d) *Codes and rituals.* Codes are 'a set of gestures, of conventions, of ways of being.' They give rhythm to both time and relations (Lefebvre, Régulier 2004a: 94). Rites are social and collective rhythms. They are 'forms of alliance that human groups give themselves.' Rites have their own time/rhythm, and punctuate everyday time. These may be 'gestures, solemn words, acts prescribed in a certain sequence.' Rites take the form of religious rites, broad sense rites, simultaneously sacred and profane, i.e. festivals, carnivals, and so on, or rites of 'intimate conviviality' or 'external sociability,' political rites, i.e. ceremonies, commemorations, votes, and so on. (Lefebvre, Régulier 2004a: 94)
- e) *Rhythms 'of the self' and 'of the other.'* In contrast to other groups of rhythms that are part of social time, these rhythms belong to asocial time. Rhythms 'of the self' are closer to ritual rhythms. They are quiet rhythms, and 'intimate forms of consciousness.' They have presence yet they do not represent, 'opposing self-presence to representation.' They 'organise a time turned towards private life.' Rhythms 'of the other' are 'activities turned outwards,' 'rhythms of representation,' 'formalised and corresponding to frontal expression' (Lefebvre, Régulier 2004a: 95).

Summary (reflections)

With these categories/groups of everyday life rhythms both Lefebvre and Zerubavel lay an important ground for the exploration of rhythms in cities. Although exploring rhythms from within a mixed philosophical/political/sociological or strictly sociological disciplinary perspective, respectively, these contributions present everyday life and social rhythms as location specific. They are indissociable from places where they occur and are denoted by particular behaviours. Descriptions on various rhythms of society are always drawn from the description of both social and spatial environments in which they take place. Space implicitly belongs to their essence.

This fact makes Zerubavel and Lefebvre's groups of rhythms significant samples and starting points in the study of urban rhythms. The rhythms described fall into the two categories described in the beginning of this sentence: everyday life rhythms and spatial rhythms.

Zerubavel contribution is particular significant in the sense that it offers three broad categories of rhythms, which are in particular useful when addressing and classifying rhythms in urban space. All three categories, sociorhythms, physiorhythms and biorhythms are part of urban places. In each place a wide and specific variety of urban rhythms correspond to them. Some rhythms are perceived spontaneously, others only after thorough and careful observations and analysis.

In contrast Lefebvre's categories are of extreme relevance in the study of everyday life in cities in general, yet necessarily adequate for the specific study of rhythms in urban places. Cyclical and linear rhythms are undoubtedly significant since generally rhythms fall in these categories, as demonstrated in the first section of this paper. In this sense, they offer strong guidelines for the observation of rhythms in urban space. Also public and fictional rhythms as well as codes and rituals are of obvious significance. Both secret and 'of the self' and 'of the other', are internal rhythms which generally do not directly and explicitly form part of urban space, however they influence what happens and how it happens in space. Furthermore, throughout his studies, in particular the *Rhythmanalytical Project* (Lefebvre, Régulier 2004b) and *Attempt at the Rhythmanalysis of Mediterranean Cities* (Lefebvre, Régulier 2004a), Lefebvre makes loosely reference to everyday life and spatial rhythms which give hints and insights to where rhythm analysis projects in urban places might focus on. He, for example points out bodies, daily rhythms, gestures, movement and traffic, exchanges of all kinds, sounds, sudden events, festivity, ritual, rhythm of moods, seasons, weather, built environment and urban functions, light and darkness, colours, smells, the present-absent, what one hides/shows/goes to see outside, tide and waves and Americanisation.

This review, and urban space/location as frame and condition assist in the formulation of a framework of what urban rhythms might be and how to study and observed them.

Characterising urban places

Urban rhythms may have a variety of characteristics. Some repeat and move (or suggest movement) in a regular way according to a specific beat and identifiable measure in urban space. Everyday life and spatial rhythms have each a different relation to space. While everyday life rhythms are to some extent influenced by location/place, spatial rhythms are inherent part of a location or a place.

In urban places rhythms can be distinguished within three categories: socio-cultural, natural

rhythms, and spatial rhythms. Social rhythms depend and relate to cultural rhythms, and in conjunction with natural rhythms generate sound, smells, and influence as well dynamic spatial rhythms. Spatial rhythms can be distinguished in two sorts of rhythms: dynamic and static.

Broadly under these categories, urban rhythms can be identified/traced in urban spaces, in the form of social, cultural, natural, sound, smell, and dynamic and static spatial rhythms. With their inherent characteristics they characterise urban places. The following are suggestion of how to trace and where to focus on when tracing these rhythms in urban public spaces:

- a) Social rhythms are particular social and spatial events/activities/practices with specific durations taking place repeatedly over the day or rather daily, weekly, monthly, seasonally or yearly. Examples are mums with their kids or groups kids passing-by together for school early morning, tourist or visitant groups stopping always at the same spot of a square, business-man having long and brief meetings at particular spots, people queuing at the concert hall at 8:15 pm and cinema at 10 pm, restaurants full at 1 pm and empty at 3 pm, skaters groups meeting from 4 to 8 pm everyday, shops opening and closing precise times, weekly market, the monthly flower show, the yearly cinema festival, and so on.
- b) Cultural rhythms are gestures, codes, dressage and rituals. They can be recognised in people waving, particular groups practices, men in suits in the morning, children in schoolclothes, young groups dressed up for clubbing or concert evening, mix-ethnic groups walking in specific styles of clothes, families walking together dressed up for church on Sunday morning, church bells ringing or Mosque singing on Friday afternoon, biking in the city, festivals and so on.

c) Natural rhythms are circadian and circannual natural changes. This groups entails for instance sunrise and sunset, the shortening and lengthening of shadows in spaces, provoked by the rotation of the sun over the day and year, variations of light and darkness due to changes of weather over the day, repeated raining and stronger or lighter winds over the day, and week.

- d) Sound rhythms could also belong to the group of urban rhythms. They are the murmur of crowds or loud speaking of individuals in contrast the crescendo and decrescendo noise of the approaching and leaving sound of cars, plane or helicopter motors, birds singing, dogs barking to passers-by, singing and playing on the street, yelling of salesmen at markets, ringing bells of churches, clocks, private homes, and so on.
- e) Similar, smells invade urban space recurrently over time. Everyone knows the early morning fragrance of people passing, the moist earthy smell after a rainy night, lunch and dinner time cooking, flowers in the garden, grass in parks, car exhaust, and so on.
- f) There are two groups of spatial rhythms: f-1) dynamic rhythms such as movements, trajectories, intensities of flows of people or cars with particular speed and frequency, such as

fast or slow people walking or cars passing, concentration and dispersion of people over the hour or day, groups of people or cars starting or stopping at crossings, fluxes of people at the same speed in the same direction for identifiable period of time; f-2) static rhythms such as repetition of elements or colours in building facades and flooring, repetition in shops or restaurants or homes, harmonious displacement of objects such as in sequences, in circles, and so on.

Social and cultural rhythms are not always separately distinguishable, so one might want to consider rather one group – socio-cultural rhythms. Further, social and dynamic spatial rhythms also relate closely to each other, which also makes this groups particular difficult to address singularly.

_3. Urban rhythms and senses of time and place

It is our sense of time, our sense of ritual, which in the long run creates our sense of place, and of community. In our urban environment which is constantly undergoing irreversible changes, a cyclical sense of time, the regular recurrence of events and celebrations, is what give us reassurance and a sense of unity and continuity (Jackson: 1994: 25).

Sense of time: urban rhythms suggest and represent temporality in urban place

Urban rhythms nurture sense of time and influence sense of place. One lives and perceives everyday life rhythms and spatial rhythms as times of a place, and these influence feelings and senses of place.

As argued in the first chapter of this paper, urban rhythms embody time. They have characteristics of time, and in urban space are even often perceived as time, i.e. the personal time of the old lady passing the crossing, the physical time of cars passing in a typical speed, the reoccurring (clock) time of children entering and leaving school, or shops opening and closing, the social time of friends chatting on the street, the children play-yard time, or the concert time, the cosmic time of day time and night, and so on. Thus certain groups of rhythms correspond to certain senses of time. Personal and biological rhythms related to notions of personal time, physiological and clock time to notion of objective/abstract time, the social time relate to the notion of subjective time, and natural rhythms relate to the notion of cosmic, astrologic time. Overall, urban rhythms suggest and represent temporality in space, a complex of intimate/experiential/lived times and local and objective times.

Sense of place: urban rhythms are representation, memory and way to engage urban place

Urban rhythms characterise places and also influence feelings in and of places. They have an impact on our sense of familiarity, security, intimacy and well being in urban place. As argued earlier, urban rhythms are location and place specific. Everyday life rhythms, influenced by locations and spatial rhythms themselves, form part of locations and spaces. Both groups together characterise urban places. In this way, urban rhythms create part of the image of a place and play an important role in how one remembers places (through their rhythms). London is an exciting place to consider. The stop-and-go of traffic in symbiosis with energetic, concentrated and speedy movement of business people on inner London sidewalks, in contrast to and in conflict with the slow pace of map-following tourists, provides one example. Another instance is the characteristic slow mood of summer in Regent's Park, with birds endlessly repeating their singing, people scattered around on the grass, groups wandering along the paths, regularly interrupted by the pace of joggers. A third typical example is provided by scattered people frozen in front of train schedule boards in Victoria Station, waiting for the announcement of their trains, which are criss-crossed by people following their own business. One subconsciously recognises these social everyday life rhythms as part of these spaces and they contribute to the building of the image and remembrance of those spaces as places. Often urban rhythms become even more important than physical characteristics of places itself, thus becoming collective representations and memories of it. Besides, urban rhythms, a part of people's life-world, are lived spontaneously, people participate and produce everyday life and spatial rhythms. In this way, urban rhythms, significantly, both describe and have an impact on the way we engage with and live in urban spaces. Thus, urban rhythms are not only traces of times in space, as discussed in the sections above, but they take the form of representations, memories and way of engaging urban places.

Urban rhythms influence feelings in and about urban place

Urban rhythms influence one's feelings in space and about space. How a place feels, social, intimate, or rather distant and cold, relate to the presence or absence of certain groups of rhythms, and to the way they do or do not relate to each other. Whether one feels a place is social, relaxed, or speedy and stressed depends on the intensity and dominance of certain kind of urban rhythms in that space, either social rhythms, personal and biological (when one walks alone in a place), or, similarly, natural rhythms, and the physical rhythms and clock rhythm. For example, whether the dominant rhythms in a place are car passing, or groups of young people meeting regularly, children's playgrounds, or colourful surface patterns and repetition of natural elements such as trees, planters, and so on, the feeling *of* place and *at* the place varies. Thus, dominant regular or intense rhythms in urban space influence how one understands, perceives and feels places – for example sociable, collective, impersonal – and, in this way, add to the sense of the individual and social level in the sense of place.

Furthermore, temporal regularities (urban rhythms) nurture feelings of permanence, security, familiarity and senses of fellowship and intimacy and well-being in urban places. These are based on shared experience (Jackson 1994: 25). Repeated participation, or simply the perception of regular and significant events and social practices, nurtures familiarity and awareness of the space where practices take place. Feelings of time suggested through rhythms, as discussed earlier are the basis of our sense of identity, and 'matter of deep emotional importance.' Kevin Lynch and John Brinckerhoff Jackson argue that these are 'critical for our sense of identity and continuity' (Lynch 1990: 628; see also Jackson 1994: 25). Zerubavel also recognises that feelings of temporal regularity mean security and relaxedness as well as familiarity and comfort in space (Zerubavel 1981: 10). Thus, urban rhythmic regularity, as in everyday life offers well-being in urban space.

Yet even the disruption on the rhythmic of a place with exceptional events, and intense personal involvement in events/practices in a place contribute to the 'acquirement of density of meaning and stability' (Tuan 1977: 143). These may be festivals or street performances, or even a building site, or the place of the first kiss, or the meeting of a good friend after many years' separation at a particular spot. The feelings of security, the sense of fellowship, well-being, shared experience (Jackson 1994: 25), permanence, intimacy, and familiarity, density of meaning and stability (Tuan 1977: 140,

143-145, 179) are all characteristic traits of place.

Notably, the way one perceives and draws attention to rhythms in urban space relate to and depend from one's internal biological and psychological rhythms. These cannot be recognised in space and internal to people, though they are influential in the way people perceive, engage, remember certain rhythms, and as consequence, places.

Summary

There are a few important points worth noting. Urban rhythms nurture senses of time in urban place. They suggest and represent temporality. In fact they embody time and are perceived as times in urban places. Also, they influence the sense of place. They relate and influence particular feelings of places and in places. While nurturing particular feelings of time, i.e. social, personal, collective, physical time, rhythms intimately influence feelings of place, i.e. social space, personal or collective, physical space.

Urban rhythms characterise urban places, as they are location/place specific. Everyday life rhythms are influenced by locations and spatial rhythms are part of locations and spaces. In this context, urban rhythms strongly characterise urban places. Places are perceived rhythmically and urban rhythms are build and are part of the image of places. Most significantly, urban rhythms are not only representations, but also memories and way of engaging urban places.

Furthermore, urban rhythms also catalyse particular feelings in places. The feeling of place is also affected by more or less intense, and/or dominant urban rhythms in a space. And, they have an impact on our sense of familiarity, security, intimacy, and in general well-being in urban place. On the one hand, rhythmic regularity contributes to people's well-being in urban space. And on the other hand, disruption of the rhythm of a place and intense involvement in particular events contribute to a growing density of meaning. Yet both together contribute to feeling of stability.

Overall, urban rhythms nurture both senses of time and influence the sense of place. And, in this context, urban rhythms play an important role in the design and feeling of character and identity of urban places.

_4. Challenges to the urban analyst

Until recently environmental design was preoccupied with the permanent physical artifacts: buildings, roads, and land. But the human activities occurring among those artifacts are of equal or greater importance to the quality of a place. With this principle in mind, physical design has been broadened to become spatial design, planning the form of behavior and things in space. But if it is to deal with behavior, it must consider the temporal as well as the spatial pattern, and it becomes art of managing the changing form of objects and the standing patterns of human activity in space and time together (Lynch: 1972: 72).

This paper besides introducing the concept of *urban rhythms*, proposes a new mode of looking and thinking about urban places, which is focusing on inherent dynamics as complements to rather static patterns of physical forms and surfaces. More than what one can find in spaces in terms of elements or physical configurations, it is important to observe and understand what actually happens in spaces. This will allow a better understanding of how human activity patterns actually interact, engage and respond to urban spaces and how these spaces receive value and meaning through that. Physical spaces should not be observed separately from their embodied patterns of everyday life rhythms, which enrich their identity. Rhythms, beside other factors (history, spatial attributes, stories and myths) encompassing the essence of space, nurture sense and understanding, and build the mental map and remembrance of a place.

Urban places are temporal-socio-spatial places. Their dynamic is of essence and evolves from physical space, people, nature and time. In this context, *urban rhythmanalysis* could become a potential mode of observing and analysing places which can deliver valuable insights on its temporal-socio-spatial profile of urban places, as well as understandings on the concept of sense of place. It may tell what really happens in urban spaces and will directly serve the urban professions, from urban designers to architects to planners (to name just a few), adding as a significant layer of understanding to the typically addressed urban elements/processes in these professions.

A thorough understanding and observation of rhythms will help when attempting to create the 'right' type of place or environment. It might forestall urban design solutions, which in their desire for uniqueness often become generic and exchangeable, and frequently fail to relate to specific characteristics and requirements of a particular place and its inherent everyday life rhythms.

Temporal territories peculiar to a group can be established, just as we establish spatial territories. Form can dramatize activity as well as support it. We can be given a sense of how our time fits with the time of other people and other living things. Environment can make us aware of being alive now and together in a common present, in which we sense the flow of events and to which we can attach our hopes and fears.

We act now, modifying our environment for the future. We recall now. We learn now, which is to say we modify ourselves to act more effectively in the future. An environment that facilitates recalling and learning is a way of linking the living moment to a wide span of time. Being alive is being awake in the present, secure in our ability to continue but alert to the new things that come streaming by. We feel our own rhythm, and feel also that it is part of the rhythm of the world. It is when local time, local place, and our own selves are secure that we are ready to face challenge, complexity, vast space, and the enormous future (Lynch 1995: 88-89).

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