Urban Design Research: Method and Application

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Table of Contents

I   Introduction

II   Conference Papers
Part 1: Methods of Urban Design Research

Part 2: Urban Regeneration and Sustainability

Part 3: Strategic Research and Application / Case Studies

Part 4: Urban Quality, Aesthetics, Form and Structure

Rhythmanalysis – Rhythm as Mode, Methods and Theory for Analysing Urban Complexity

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Abstract

In his last project the French philosopher Henri Lefebvre aimed to develop rhythmanalysis. This was an attempt to understand the pulse and life of the city combining the strengths of the overview of the urban choreography as seen from a window with the intense experiences of living down in the streets. Rhythmanalysis is about acknowledging the tension between these modes of observation and participation, and simultaneously, by developing qualitative and quantitative aspects of rhythms, interpreting and acting it, allowing for a complex understanding of urban life. Like polyrhythms in music, combinations of individually simple rhythms form a complex, living, and nearly incomprehensible whole. Our aim to develop rhythmanalysis as mode, method and theory focuses on natural, social and cultural rhythms, change and diversity, as a precondition for "just sustainability". For this, artistic research methods are necessary: because methods, actions and performances developed in art compile rhythm, body, and presence. They further allow for actively changing or affecting rhythm as a means to understand present situations. By developing art experiments directly in the city, strategies of capturing, being captured by, producing, and changing rhythms, opens for other ways of interacting and hereby of interpreting the urban context. Rhythmanalysis in this sense is about discovering the complex reality through production in order to elucidate theoretical and methodological concepts from change and experiments as a research method. In the analysis it is shown how by interrupting, influencing, combining and introducing rhythms on places and in buildings, actions, reactions, and new meanings arise. This makes rhythmanalysis a powerful mode of analysis that merits further development, and provides important insights into the complex, emergent processes and meanings of contemporary urbanity.

Rhythmanalyses is a collaboration between artists, architects and researchers at the School of Architecture and the Built Environment, KTH and the University College of Arts Crafts and Design, Stockholm.

1. Introduction

From his home in Paris, Lefebvre notes how life in the street follows rhythmical orders, patterns, and re-occurring sequences (Lefebvre & Régulier 1996). This overview reminds one of a map, but contains movements and sounds. It gives an idea of patterns and flows, the ability, in some cases, to follow individuals or groups in their movements, and an impression of rhythmical patterns of traffic flows and intensities over the course of the day. Down in the street, these rhythms change into more multi-dimensional experiences, where all senses are

brought into play. This discrepancy between the overview and the experience in the street shows the importance of different forms of knowledge: the consciously analytical and the lived. From this initial discussion, Lefebvre began developing rhythmanalysis from the perspective that the city constitutes a rhythmical order. Urban space forms an everyday stage for conflicts and relations between natural, social, economic, and cultural rhythms, between cyclical and linear, dogmatic and dynamic, collective and individual, outer and inner rhythms. These rhythms are both affected by and constitute cultural conditions, and performatively reproducing and changing culture. To participate in a culture means to incorporate its rhythms in a fluid relationship between bodily perceptions, the topography of place, and the perceptions of maps. To understand a culture, not only learning but incorporating its rhythms becomes important – something that in part comes gradually over time but can be done more deliberately as well, as Lefebvre sketches in his studies of Mediterranean cities (Lefebvre & Régulier 1996).

In a similar line of argument, Elisabeth Grosz (1995) claims that "bodies and cities" work in a rhythmic exchange: bodies transform the city just as the city spatially organizes bodies. Grosz (1995, p.108) views this relation neither as planned by human reason nor as a balance between bodies and cities, but as "a fundamentally disunified series of systems, a series of disparate flows, energies, events, or entities, bringing together or drawing apart their more or less temporary alignments". With quick shifts or extreme interventions (technological changes, massive urbanization, global movements of refugees or the workforce) the mutual relationship is broken, so as the body does not have the time either to adapt to or affect its situation (Grosz 1995, p.109). Even the pace and speed of walking creates rhythmical order: to follow the flows of urban space and thereby become immersed in them is nearly a social and cultural must; breaking or deviating from a given rhythm create conflicts between spatial orders and powers over the definitions of time and space (Cresswell 1996). The question is how relations between bodies and cities can be analysed without losing this complexity, at the same time as we handle the discrepancy between distanced overview and engaged participation?

1.1. Rhythms and Polyrhythms

Polyrhythms within music are built up by simple rhythms woven together to a complex whole by different instruments, voices, and rhythmical movements. The function of these rhythms is to hold together not only a musical piece, but also the individual with a social context. However, that individual rhythmical patterns combine into compositions of rhythms does not inherently mean the emergence of a harmonic whole; some rhythms correspond, some intervene, respond, or conflict with one another (Arom 1991). This can be between different people or activities, but also between biological and mechanical rhythms. Often, seemingly dissimilar rhythms can blend into harmonious wholes, while apparent corresponding rhythms, once put together, can prove to be in conflict. Certain aspects of rhythms are remarkably sensitive to discrepancies, whereas others are less, and discrepancies of certain kinds can contribute to variations within a continuously perceived whole whereas others can interrupt, change, break, or contradict each other or the complex polyrhythms. This is not to suggest that harmonious rhythms are necessarily preferred, but to make clear how rhythms work and how they are also flexible as open and elastic yet sensitive to difference, change, discontinuities and distortions. Similarly complex polyrhythms are built up in urban space, generated within the body and through movements and activities integrated into rhythms that structure our lives; the time of the clock, the cycle of days, the changes of seasons.

1.2. Rhythm and order

Lefebvre's work on rhythmanalysis is set within a perspective that research works by dividing the whole into parts (from particles, genes and individual persons to functions in the urban fabric), and that it presupposes an objective researcher. This, he claims, has had consequences not only for the way questions are formulated but for how we deal with and perceive order – something that remains even after the post-modern criticism of both the ideal and the very possibility of objectivity. In this mode of thinking, order in society is created by separation of activities into different institutions, with corresponding divisions of people (Rose 1999, Foucault 1977). In the long-run, when every aspect of human life finds its proper place distinguished and separated from other, the individual spends his or her time daily on the move between different activities (Cresswell 1996, Augé 2002). Although the more raw forms of functionalism have ostensibly been abandoned, the ideology of mobility has not, nor is there an end to the ongoing development where bridging large distances become a necessity; the need of travel within and between areas in daily life as a result of the way they are planned and organized has continued to grow. The emergent traffic networks make passages possible, but also prohibits accessibility, sets up boundaries, establishes insecure places, abandoned zones and culs-de-sac. An idea of order that separates has difficulties managing these uncertainties. In practice as well as in theory; what cannot be included into the system is experienced as disorder (Sand 2008), or at least historically labelled superficial or unimportant, and there are strong tendencies still driving towards an ordering of urbanity in the functionalist sense in spite of the critique of modernist planning. In this, it is important to see how ordering principles, which in practice are valid only for parts of the system, become perceived as consistent, allowing us to handle the underlying complexity, overlook discrepancies or pick the ordering principles we agree to ideologically or subconsciously (Jameson 1991, Koch 2007).[1] Whilst not inherently wrong, they might be explaining only local variations, certain aspects or parts of it, or surface fluctuations, leading both analysis and proposed solutions down problematic paths. Still it is often necessary to establish an order or a structure with which to work and think in order to move projects forward, as well in practice as in research. Again, historically, dominant orders have been materialized and institutionalized in museums, department stores, libraries, schools, et cetera (Bourdieu & Darbel 1991, Markus 1993, Bennet 1995) – sometimes in a curious contradiction where spaces offering relative freedom also reproduce norms and structures (Sparke 1995). Also in daily life we continuously order and re-order things based on culture and situation, a kind of sense-making but also a necessity, where spatial and material negotiations constantly take place (e.g. Baudrillard 1996, Koch 2007). Problems arise when these practical necessities are established as truths on how urban space should be analysed or organized. Dewey (1980, p.20) perceives these divisions as disorganization where fundamental conflicts are left unresolved and made permanent, kept in place by the exercise of power. Dewey (1980, p.154) claims that this division lacks the *order* created by rhythm – "ordered variation of changes".

1.3. Rhythmanalysis and Urbanity

In contrast, rhythmanalysis accepts the complex reality of urban space and constitutes a specific mode to handle complex situations. The ambition was nothing less than "to found a science, a new field of knowledge […] with practical consequences" (Lefebvre 2004, p.3). In spite of this ambition, rhythmanalysis has not been systematically developed within urban research. Rhythm as a concept has been used within many fields in specific investigations (e.g. Mels 2004), but still has a long way to go to become an established research method as Lefebvre intended – perhaps because of its complexity or the paradox it poses for the researcher: rhythms can not consciously be analysed in the middle of an ongoing situation, but

for an analysis outside of the rhythms their meanings remain elusive; "Yet, to capture a rhythm one needs to have been captured by it. One has to let go, give and abandon oneself to its duration. Just as in music or when learning a language, one only really understands meanings and sequences by producing them" (Lefebvre & Régulier 1996, p.219). It also cuts through research traditions, where acceptance of the strengths and weaknesses of both qualitative and quantitative research needs to be handled carefully yet not only used to complement one another but to, in a literal way, interfere with and juxtapose one another, highlighting the tension upon which rhythmanalisis is founded. Furthermore, rhythmanalysis must be performed through oscillating between actively participating and interpreting, but also through adapting a consciousness of the body's shifting needs over time and space. It is of importance here to note, that Lefebvre (2004, p.21) stresses the significance of "thinking with the body"; the "rhythmanalyst" gives-in to the collective experience manifested in rhythm (Hillier 2007, p.101). These preconditions make rhythmanalysis radical as research method. Quantitative aspects, marking and regulating time, flow, movement, pace, and space are joined with qualitative aspects in and through the human body. The method is meant to make this paradox of the discrepancy between quantitative and qualitative aspects a methodological strength.

The idea that rhythm matters is not new in itself. It is of worth noting for example that the makers of one of the most reknown Subway Suburbs in Stockholm – Vällingby Centrum – had similar reasoning. Albert Aronson (1956, p.78) described it as that "Already in the beginning it stood clear to us, that if we could not within the given volume, small compared to the big city's, create something of the pace, the buzz, the light and the rhythm which distinguishes a 'well developed' urban life, Vällingby Centrum would be experienced as a hoax".[2] Similar arguments can be found in many projects of its time, but the intentions of the plans of the 1940s and -50s, "the development and activation of the individual citizen"[3] (Ahlsén & Ahlsén 1944, p.430), never materialized rhythms in the ways it was hoped. Whilst not spoken of in similar terms today, perhaps one of the keys to understanding these modernist areas lies in understanding their rhythms, and what rhythms can develop, so that expectations and planning can correspond to what is possible or reasonable instead of constantly running the risk of being, as Aronson says, exposed as "hoaxes". In this it is important to set them in their regional context and – not the least – the regional rhythms in which they participate; the city, no longer built up around one gathering centre with a rural periphery, contains fragments of cultural landscapes, parking lots lying unused large parts of the day, abandoned industrial areas, constructions no longer used (Wikström 2007, Nielsen 2001). Suburbs are defined by specific distances to and daily relation to the city, but also to each other and to themselves. Daily trips between suburb and city create a range of rhythms, passages back and forth, changed by the day-night cycle and the seasons. These trips constitute on one hand a concrete passage between suburb and city, but on the other also a passage between memories, associations, feelings, perceptions, perspectives, and terms where "correspondences" are made between places in a lived narrative (Augé 2002).

With a concurrent political focus on densification, questions of safety and security, and aesthetical order, simple re-active solutions are often proposed. In this light it is important to develop tools to analyse how different parts of the city relate to one another; suburb to city, home to homelessness, collective to individual, order to disorder. Analysing the city as a composition of polyrhythms means to maintain the complex relations between "bodies and cities", between slow and fast changes, between the local and the global, between ordinary rhythms and ideologies, traditions, and utopias. One can raise the question if the modern city develops a kind of monorhythm - what is the consequences of this? Without an understanding of rhythm it seems impossible to take these issues with the seriousness they deserve. Issues

which are of importance for sustainability, in as well economic as social or ecological sense: rhythms of social life and natural rhythms affect all of these. From an urban planning point of view the question of what *rhythms* are needed to support community, local centres or services, sustainable transport behaviour, and so forth seems to be a key question, and a perspective of rhythms and polyrhythms seem to allow for a more flexible and open-ended approach than terms like functions or activities. From a analytic perspective investigations into rhythms allow for a wide and complex understanding of, for instance, the interplay between time, space and activity in daily life and how it affects sustainability in various ways. From a simple question of the rhythmic dependencies on customers of a centre's commercial actors to questions of the rhythm of public transport or the pulse of public life needed for options to be viable or attractive – or even existing – for inhabitants. Also the longer-term rhythms of nature or life play in, as well as the rhythmic conditions for different phases within these rhythms. Rhythm here offers the possibility to not prescribe specific forms or activities, but to understand them from a perspective that makes them more relevant in how they, as polyrhythms, make up urbanity.

2. Methodological Excursions

The current research builds (aside from the work of Lefebvre) on earlier projects from many aspects of radically different kinds – which also came to approach rhythm from methodologically nearly opposite directions. In research as well as in courses delivered at the KTH School of Architecture, University College of Arts Crafts and Design, and the SU Centre of Fashion Studies, we have initiated, produced, and developed courses or course elements from our practices as artist and architect, where we have experimented with rhythms as analytical tool. In her Ph.D. research Sand (2008) discusses the spatial and temporal aspects of repetition and change in relation to everyday practice as well as artistic and research practice, and Koch (2007) discusses the different rhythms of shopping space through the distributions of goods and personnel as compared to the flows and browsing patterns of shoppers. Methodologically these come from in one case a mostly qualitative angle, and in the other a more quantitative angles, the meeting of which is one of the bases of rhythmanalysis as Lefebvre presents it. In order to move the methodological discussion forward, it is worth exploring these projects further to consider how they formulate early parts - combined with the main discussion of this paper this could constitute a future Rhythmanalysis, incorporating Lefebvre's initial notion but also methodologically and theoretically developing it several steps.

2.1. Developing Quantity

In studies of department stores (Koch 2007), libraries (Koch 2004) and suburban centres (Borén & Koch 2009), rhythm as a concept has been used to develop a better understanding of quantitative observations. In the first iteration, the analysis approached the relation between movement and browsing, based on a simple yet rarely acknowledged *disconnection* between what is sometimes called 'movement and being'. One important factor observed was the stability of the rhythms in places *relative one another* (Lefebvre stresses the importance of understanding rhythms as relative) although they were individually changing over the course of the day, and how these patterns were reoccurring following certain logic, even if they were occasionally interrupted by unexpected events. Similar findings have been made elsewhere (e.g. Penn 2005). This is a phenomenon we easily recognise from cities: we know where (and when) to go to experience "the buzz", to be at peace, to be allowed privacy, or to from a more secluded position watch the flow – although we may occasionally be surprised by unexpected degrees or lack of activity. Thus when the narration in novels such as Breton's (2000) Nadja

moves not only temporally or after plot but also spatially to find sites for the story to take place, we recognise the urban patterns of relative rhythms in which they navigate.

However, as it turned out, the number of customers browsing departments is fairly independent of the number of people passing by, and conversely that movement flow outside of departments is fairly independent of the number of people present in, for instance, a café. It is not the case that there are no relations, but where both models suggesting attractors define flows or that flows define where people end up are only explaining minor portions of the activity patterns observed. Instead, it can be said, for example, that relative numbers of browsers and passers-by formulate a rhythm, which is further defined by time-space behaviour of such things as pace, time spent in the department, or how much service can and is given to customers (Figure 1). High degree of service, which is one argument for how to do well within retail, turns out to be rhythmically dependent on a slower pace and a lack of flow. Such rhythmic identities then tends to correspond to possible identities taken by or given to the commodities for sale so as to make the situation of shopping similar to that of the situation in which the consumers are likely to see themselves using it (Chua 1992) – also from a rhythm perspective. With this observation in mind, it is possible to move to a wider context and better understand of spatial and locational strategies both within planned out complexes and emergent patterns in less controlled (but not uncontrolled) situations. As suggested in Borén and Koch (2009), learning from this may mean that we gain a more nuanced and critical understanding of viable strategies to work with when trying to develop, for instance, dying centres *within* suburban rhythms.
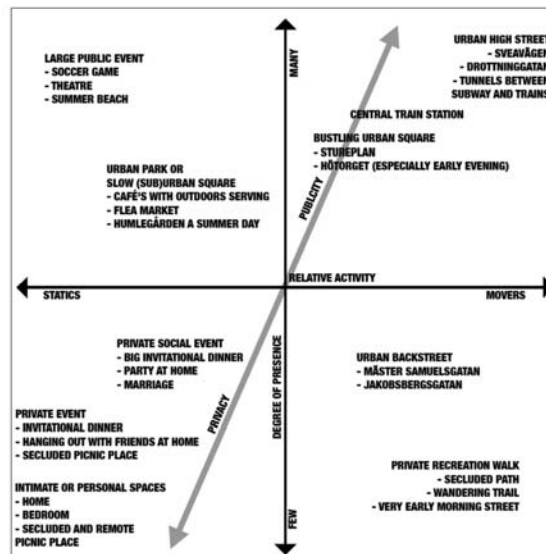
Figure 1. A rough sketch of rhythmic qualities interpreted from statistical observations. From Koch (2007).

2.2. Rhythmic Quality

In art experiments, urban exploration, interventions in the city in courses with students, we soon found that "spaces in-between" – constructions and aspects between functions and definitions – cannot be defined ahead of the rhythmic process it carries out and of which it is a part (Sand 2008). However, in Sand's work as artist, researcher and teacher it has been seen that it is not the rhythm itself that activates the space in-between, but, rather transformations

of rhythm. That insight made it important to continue to develop qualitative artistic methods in order to comprehend complex combinations of rhythms between planning and self-organisation inherent in the city itself and in knowledge production. One example of that was one of Sand's art experiments, a forty-two meter high swing mounted on the bridge, Älvborgsbron, in Gothenburg harbour, Sweden (Figure 2). A dancer on a swing moved slowly between the bridge and the ground, captured in a rhythmic experience of being earthbound and then weightless. The rhythmic procedure of keeping the swing in motion employed the bridge and re-formulated its function by introducing another corporeal process, in the space in-between the bridge and the ground.

Figure 2. The art experiment in Älsvborsgbron, Gothenburg.

As another rhythmic method, walking and subjective mapping strategies, brought from contemporary art practice, demonstrated how closely bound to perception, power and identity both walking and mapping are. Experiences of walking established a turning point in the western notion of art in the 20th century, when artists literally walked out from the galleries onto the streets. Reworking those strategies in urban exploration, with students, confronts us with new ways of walking: instead of walking forward, a more complex "rhythmic imbalance" between the body and the space was encountered; walking and falling, walking in circles, getting lost as well as taking in information through the feet.

By new combinations, breaks and transformations of rhythms as relations between bodies, sites and concepts, we are able to activate spatial, temporal and theoretical dimensions of the in-between, and so hidden and forgotten rhythms of importance for the city.

3. A methodological proposal

With the above in mind, we suggest that there are certain ways in which rhythmanalysis can contribute as much to research methodology as to the body of knowledge. This has to do with the ability to understand complexity in relation to individual rhythms, and the way this can be formalized into method. This means that methodological development is needed both in the participation in, observation of, and interpretation of rhythms, so that its potential can be utilized. A rhythmic approach can be discovered by following and becoming part of the city's rhythms, by returning to places to study changes over time, by oscillating between perspectives, between distance and participation, between qualitative and quantitative. It is important to challenge the dominance of the visual by developing a concentrated attention to sound (and silence), sensitivity for atmospheres and moods, scents and tactical sensations.

We find one example within art and in the architect group *Art et Action* who worked in Paris 1919-1933 (Read 2005). In combinations of theatre and architecture they built up experiments of urban situations in urban space and in the form of theatre, staging everyday rhythms but also rhythm as creating order and meaning through song, speech, poetry, choreographed movements, dance, music, and radio transmission. The intention was to try new ways of acting and behaving in urban space. Another strategy is to emphasize the differences inherent

in any rhythm (repetition) by deliberately "getting out of step", exaggerating differences and oscillating between meanings by finding and loosing the beat. To break rhythms open for other ways of interacting and hereby ways of thinking and interpreting. One example is the investigations into the limits of public space in a recent edition of Blueprint (2009), where a number of artists and architects were asked to test "how public public space is" in a number of squares in London. Another is the massive change to the New York Central Station when more than 200 people froze in place for a few minutes, to then just continue as usual. The emerging confusion interrupted and changed the common, rhythmic flow; discussion, reactions, and meanings arose that were new (http://improveverywhere.com/2008/01/31/frozen-grand-central/).

If we perceive these strategies as strategies of rhythm, there is within most art forms – music, dance, theatre, installations, performance – a multitude of methods for working with and compiling complex situations of space, sound, light, voices, bodies, movements, in a conscious structure and analysis of rhythms. Contemporary art practice locates itself in the middle of ongoing change, experimenting and affecting it, showing how art and architecture is used both to stabilize and de-stabilize a "natural" social and political order: in a spatial turn, urban space was made into a place for actions and an object of art in itself (Gabrielsson 2006, Kwon 2002, Place 2003).

In the light of this, together with what has been learnt in earlier research, we propose that the main focus for developing rhythmanalysis needs to be to analyse sites where rhythms are manifested as they are formed and take place as complex combinations of everyday experiences and creation of meaning. Of importance is thus the starting point in an artistic relation to rhythm, not only studying rhythms but also working with creation, combination, exaggeration, and breaking of rhythms. Analyses within the practices of art and architecture have as a purpose to understand *change*. Analysis of rhythms and relations can show underlying ideologies behind ostensibly simple solutions to the city's problem, but also highlight the potentials and possibilities of each situation. For this reason rhythmanalysis should focus on strategies to affect the rhythmic flows. Such a methodological stance can be described in four steps, which are all meant to learn more about rhythms: (1) to capture rhythms, (2) to be captured by rhythms, (3) to produce and combine rhythms and (4) to change or break rhythms. All four of these steps are intertwined with one another; it is about producing and discovering the complex reality in order to elucidate theoretical and methodological concepts through change and experiments as a research method, in which artistic methods become absolute necessities (Rendell 2006). The analysis is thus built on an understanding of rhythms through methods, which can be described as operative analysis through strategies of *integration* and *intervention* (Kwon 2002).

3.1. Observing and Documenting Rhythm

In order to carry out rhythmanalysis perceptions, conceptions of the world need to be modified in order to train the senses, as the ability to constitute a relation to aspects of reality (Sällström 1999, pp.16-). Sensing the different aspects of rhythms is learned by getting to know the elasticity of rhythms, and how it can handle stretching and changing while remaining. And where or when it turns into something significantly different. But, methodological development of rhythmanalysis has another problem: a central problem for rhythmanalysis is the lack of obvious methods to document rhythm in the urban fabric, which means by necessity that developing the method comprises the development of methods to map, document, represent and present rhythm; notation systems, terms, and forms of analysis able to keep the complexity without becoming confusing or impenetrable.

In contemporary art and in the emerging field of artistic research methods the documentation of rhythms is emerging as a tool for exploration and experimentation. Within the artistic fields there is already knowledge and forms of documentation and expression of complex compilations that are useful for the project. The complexity of being both part of and outside rhythms in the city aim for documentation with different spatial and perceptive perspectives and relations. For example the Canadian artist Janet Cardiff (Cardiff & Schaub 2005) shows how rhythms can be compiled and expressed. In her Walks, through buildings, neighbourhoods, parks, streets in different cities Cardiff builds up complex polyrhythms by walking from one place to another. Sound in real-time – mixed with histories, voices, and music from various times and places, activates senses, memories, and experiences, through layers of fictions - actualize a world when the listener, follows in her footsteps, with a Walkman. Between physical reality and the recorded sounds, a new reality emerges between the place in which we walk and the infinite combinations of streets and layers of time in which the present inhabit the past and the future, yet unheard and unseen. By reworking and literary walking in the footsteps of earlier art projects, adapted to our contemporary situation, both a historical awareness in a contemporary situation and different aspects of working with rhythms, document it and conceptualise it, may emerge (Ruggeri 1997). Documentation in this context, though, functions in several ways; both as an understanding of a situation afterwards, as well as a way of creating new spatial insights by documentation, with for example photos, film, sound recordings and performances.

Both scientific and artistic methods still need testing and development, as well as the means through which results are communicated and presented for different recipients. Without prescribing a form, rhythmanalysis must therefore be subject to a range of attempts of representation ("publication"), which can support the development as well as potential opportunities and shortcomings. In the process of developing such forms we plan a number of methodological experiments. One is to activate a central square in Stockholm, which by any reason is nearly totally empty and without activities, by inviting hundreds of people in different ages and situations. In doing so we are able to set up another way of exploring the place, while walking and talking, and at the same time use Lefevbres double perspective of over view and participation by taking photos and filming the event from above and from the ground while mingling around in the square. By that material we are able to compare this new situation with how the square is used in a "normal" day. We further aim to investigate gradually increased or decreased paces and number of visitors in a place to study how the character and behaviour changes. In these and other projects we work with combinations of sound, rhythms and spaces, using sound and movement with film and photos in new combinations. In combination with the material experience of the city on different times our aim is to create another awareness of the rhythm of the city by using the documentation as both a source of and creation of new knowledge.

4. Conclusion

Rhythmanalysis creates new methods and terms with which to comprehend urban (dis)organization. An active relation to rhythm creates a consciousness of how repetitions and relations are foundations for human life, a knowledge that is important within all practices from architecture, urban planning, and social sciences to medicine. Repetitions show our dependence on natural cycles and hence the necessity of recycling and renewal. Relations between body, city, and nature are of rhythmic character, and awareness of rhythm gives insight into how natural, biological rhythms interplay with social and cultural rhythms. The rhythm of linear time in relation to the dynamic rhythms of the body make us aware of those rhythms that dominate at the expense of others; compare the rhythms of cars with that of the

pedestrians, the efficiency rhythmic ideal with the rhythm within the child's play, that of the elderly with the bustle of stressed young shoppers, and the different rhythms of producing meaning throughout everyday life. The importance of finding methods incorporating movement and change lies in recognizing the complexity of spatial and temporal changes, the analysis of forces, harmonies and energies in social situations. Hereby, we can acknowledge a multiplicity of ways to inhabit and make use of urbanity, from different perspectives and periods of life, where relations between identities and place are not fixed but fluid yet relevant and strong (Hillier 2007). A rhythmic concept of knowledge moves between different levels of understanding complex situations we participate in and affect every day, and which urban planning and design specifically aims to produce, support, guide, or control. It is further like rhythm itself possible to scale and stretch, making it scientifically, artistically, and theoretically powerful, as well as viable within the more limited frames of practical projects within urban planning and design, architecture, or other fields. Rhythm is something we can think *with*, making it part of all stages of a project; explicitly or as tacit knowledge. It can further provide a nuanced understanding of ostensibly similar quantitative results, such as what similar amounts of pedestrians mean, or how time and pace affect the character of public spaces. Thus it becomes a crucial instrument in developing sustainable urban environments, as it can elucidate performative, rhythmic differences in urban space that other methods are either too generalizing (the risk of quantitative analysis) or specific (the risk of subject-focused qualitative analysis) to grasp. If what is strived for is "just sustainability" such as defined by Agyeman and Evans (2004, p.157), "the need to ensure a better quality of life for all, now and in the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems", this requires a complex understanding of the multifaceted character of space and urbanity, which is dependent on a multitude of methods (e.g. Bradley 2009).

This review, preliminary foray and methodological proposal strengthens this perception, but also emphasizes the need for methodological development. As it stands, in spite of its theoretical and conceptual power, a lot of work remains to make rhythmanalysis a viable method in practice, but it seems certain that such a development would be rewarded by significant and sizeable developments in our understanding of urbanity as a complex polyrhythmic fabric interweaving spaces, activities, and people.

Notes

1 Just as there is a tendency to read in a simple order and hierarchy into self-organising systems (Johnson 2002; see also Tschumi 1996).

2 Quote translated from Swedish by the Paper Authors

3 Quote translated from Swedish by the P Authors

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III
Editorial Committee

The editorial committee consisted of seven academic experts in the field of urbanism, urban design, urban planning, and architecture. The committee members reviewed all conference papers and gave feedback to the authors. This is an alphabetical list of the committee members:

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