

OBSERVATIONS

NSEW – Urban Explorations along the Matrix

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*Exploring urban landscapes off the beaten paths and collecting ignored places to share these impressions via the World Wide Web. This is what 'NSEW – Urban Explorations along the Matrix' is about. The project NSEW (North–South–East–West), founded by Austrian artist Evamaria Trischak in 2004, uses global positioning system (GPS) devices to locate the exact minute intercept points of the geographical coordinate system (i.e. the 'matrix') within urban agglomerations. Once a place on the GPS grid was visited, the documented perceptions of the exploration are shared by uploading the captured results (i.e. photos and stories) onto the NSEW website. The technique applied on these urban expeditions – the *dérive*, or drift – refers to the psychogeographic experiments of the situationists. The NSEW approach and method was entirely approved within the Vienna based project 4816 – referring to the geographic coordinates of Vienna (N48° and E16°). But how does the concept work out when applied to other cities? This article reveals the similarities and differences of traversing such different cities as Vienna, New York, Paris, Tel Aviv, Barcelona, Dortmund, Sao Paulo, Rio de Janeiro, Los Angeles and Frankfurt using the NSEW method.*

Keywords: GPS, urban space, user participation, mind map, psychogeography, Vienna, New York, Paris, Tel Aviv, Barcelona, Dortmund, Sao Paulo, Rio de Janeiro, Los Angeles, Frankfurt/Main

INTRODUCTION

Inspired by the global positioning system (GPS), Austrian artist Evamaria Trischak developed a contemporary method to achieve a psychogeographic record of cities. In the focus of her project NSEW (North–South–East–West) are the specific minute intercept points of the GPS grid within a municipal area. Its objective is to locate and visit these places with the aid of a GPS device and to document these new discovered places with one photo for each point of the compass. Each NSEW point is thus a zoom to the encountered reality of the abstract raster of the geographical coordinate system. By homing in one of these specific intercept points, one embarks on an expedition through the city – indeed, off the beaten path of historically evolved street networks. The city becomes a surveying subject, a playground and an abstract matrix. This down-to-earth strategy inspires a systematic and conceptual exploration of urban space, which underlies a permanent change.

The possibilities of urban mapping assume different faces with the popularization of GPS -devices. The construction of virtual spaces adds a new layer, which enlarges the plot of the cities proposing new possibilities, but also other kind of confrontation. (ARTE.MOV, 2007)

The project refers to the psychogeographic experiments of the situationists¹. Psychogeography is about the immediate impact of the geographic milieu regarding the

emotional behaviour of individuals. The method to achieve this is called the *dérive*, or drift, which is an experimental behavioural pattern of traversing different urban environments (Ohrt, 1995). In the context of the NSEW method, drifting – in the sense of the *dérive* – along the GPS matrix, enables the explorer to renew his or her mental map of a city and to share these personal perceptions by uploading the captured results (i.e. photos and stories) to the NSEW website². This exchange of urban perspectives results in an ongoing participating and discursive process. The NSEW approach is following a strict top-down guideline: the intercepts of the geographical coordinate system form a neutral layer that is as objective as possible, whereas the implementation by the participants is kept absolutely open. After the concept was entirely approved within the Vienna based project 4816, the question arose: how the NSEW concept will work out if applied to other cities. By now, the unique social and morphologic realities of cities like New York, Paris, Tel Aviv, Barcelona, Dortmund, Sao Paulo, Rio de Janeiro, Los Angeles and Frankfurt/Main have been explored along the GPS matrix, even though on a much smaller scale compared to Vienna.

4816 VIENNA

In 2004, Evamaria Trischak and Nina Achathaller developed a system to comb through urban landscapes on the

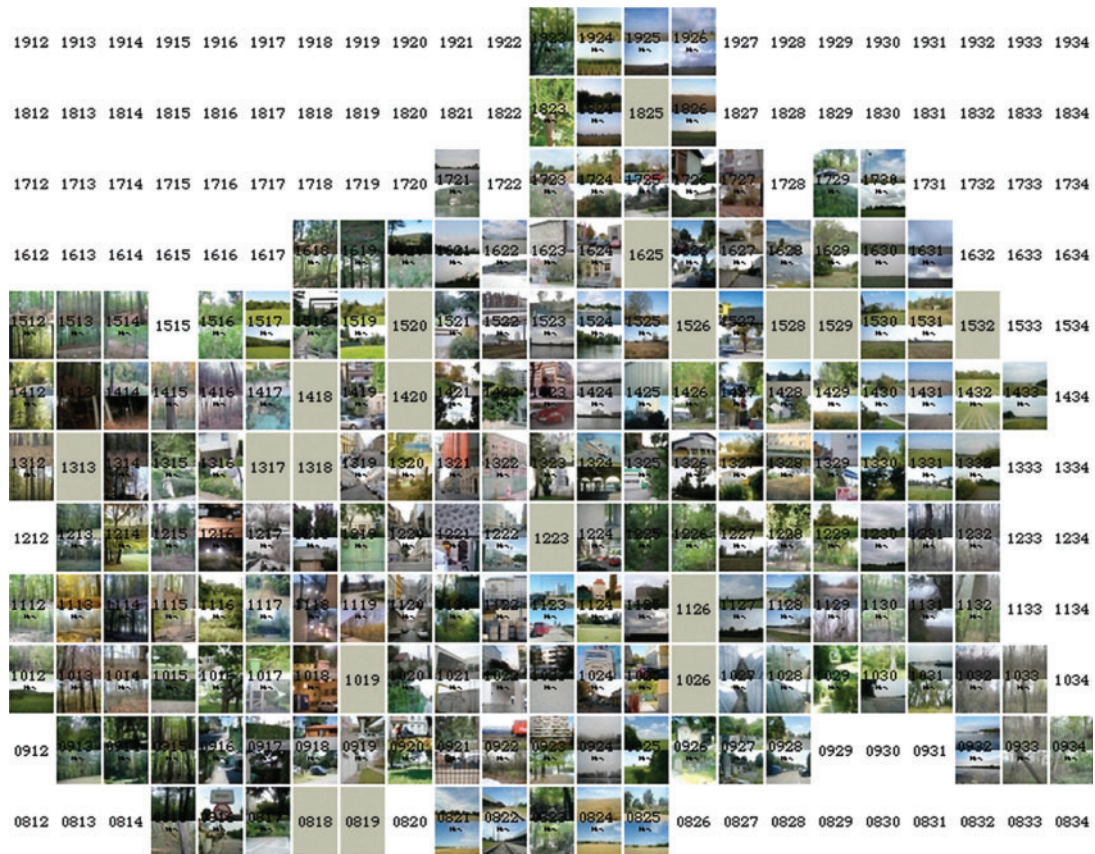


Figure 1. 4816-layout of Vienna (taken from the NSEW-website: <http://4816.nsew.at> – accessed 22 May 2009)

GPS grid (on minute scale) to avoid taking always the same paths across town. Two years later, the project officially started after a series of beta tests and refinements of the concept. Vienna is situated 48° north of the equator and 16° east of Greenwich. For this reason, all geographic coordinates in Vienna begin with N48° and E16°. The project’s name, 4816, is a reference to this fact. By now, the participating urban explorers found over 90% of the 185 intercept points, which are extensively documented on the 4816 website³. These include various locations characterizing the urban space of Vienna, e.g. never recognized impressions from Vienna’s City Business District and historical centre, private gardens and backyards, parks and forests and some less accessible places like power plant grounds or the middle of the Danube River among others.

population of 1.5 million people is roughly comparable to Vienna. Because of the relatively small area of the island (about 3 × 21 km), the population-to-GPS point ratio of 62500 inhabitants/point is relatively high compared to other cities mentioned in this article. So one shall assume that finding and reaching the 24 intercept points of Manhattan should be a piece of cake – but it is not. Unlike Vienna, the unique architecture of the vertical city Manhattan is restricting the view from the street level to the sky, respectively to the orbiting GPS satellites⁴. Besides Central Park and a few other places, the specific vertical alignment of Manhattan’s urban landscape is leading to a different approach of locating the 4074-points. Very often it is possible, permission assumed, to access the roof of the buildings. In doing so, the perception of Manhattan will be extended – literally one’s horizons will be broadened.

4074 MANHATTAN (NEW YORK)

In April 2005, New York was the first city the NSEW method was applied to apart from Vienna. Thereby, the spatial focus was set on Manhattan (N40°W74°). The

4802 PARIS

Within the city proper of Paris (N48°E02°) about two million people live in an area of around 100 km² (United



Figure 2. 4816 Vienna (photos: Evamaria Trischak)



Figure 3. 4074 Manhattan (photos: Evamaria Trischak)



Figure 4. 4802 Paris (photos: Willi Dolleschall)



Figure 5. 3234 Tel Aviv (photos: Evamaria Trischak)



Figure 6. 4102 Barcelona (photos: Evamaria Trischak)

Nations, 2008), which contains about 50 intercept points⁵. The NSEW approach is without regard to the conventional arrangement of the Parisian urban space, i.e. the streets and arrondissements. Obvious points of interest like Sacre Coeur, Notre Dame, Eiffel Tower, Louvre and Centre Pompidou get left out in favour of ordinary, but not less fascinating corners of the city, which was the hometown of the prime meridian until 1884.

3234 TEL AVIV

This Mediterranean city with more than 5000 buildings in Bauhaus style is an architectural piece of jewellery. But the NSEW experience in Tel Aviv (N32°E34°) comes with certain side effects. Trying to catch one of the 3234-points, the 'GPS-hunter' can easily end up being the prey. Just imagine which impression a person, equipped with electronic devices sneaking around houses and backyards, can convey in an Israeli town. Anyway, regular security checks at cinemas, shopping centres, etc., are business as usual in Tel Aviv – a very special challenge.

4102 BARCELONA

In regard to the NSEW method, Barcelona (N41°E02°), even though another Mediterranean city, is completely different compared to Tel Aviv. Not only because 'point-hunters' are not seen as shady characters *per se*, but also because of the district of Eixample with its long straight streets, a strict grid pattern crossed by wide avenues, and square blocks with chamfered corners⁶. Of course, this grid structure works like a magnet on explorers of the matrix. However, on ground truthing mission, it turned out to be a fight against the traffic, which streams at least over three lanes and also over one or another 4102-point.

5107 DORTMUND

An NSEW workshop, held in June 2008 by Evamaria Trischak, brought Dortmund (N51°E07°) into the centre of attention⁷. The participants were strolling the city in groups of two or three and returned with sparkling eyes and great documentary results. The latter worked as the basis



Figure 7. 5107 Dortmund (photos: Evamaria Trischak)



Figure 8. 2243 Rio de Janeiro (photos: Evamaria Trischak)



Figure 9. 34118 Los Angeles (photos: Evamaria Trischak)



Figure 10. 5008 Frankfurt/Main (photos: Evamaria Trischak)

for discussion about their 5107-experiences, as well as for other topics like faced, solved or unsolved problems of Dortmund’s urban space⁸.

2243 RIO DE JANEIRO AND 2346 SAO PAULO

Also the southern hemisphere was already in the scope of the NSEW method. In September 2008, Evamaria Trischak visited the Brazilian cities of Rio de Janeiro (S22°W43°) and Sao Paulo (S23°W46°) while participating in the mobilefest 2008⁹. Taking the chance, the first 2243- and 2346-points got explored. Besides the Latin American charm, urban research is facing a lot of problems in cities like Rio de Janeiro and Sao Paulo¹⁰. Heavy traffic and missing public transport possibilities as well as non-existing paths for pedestrians are just some examples of the problems encountered.

34118 LOS ANGELES

Applying the NSEW method to the city of Los Angeles (N34°W118°), Evamaria Trischak had to face the limitations resulting from the US interpretation of (private) property. For example, the fence of a school ground turned out to be an adamant obstacle. Although the first

34118-GPS-point would have been just a few metres behind the fence, only a few photographs could be taken from the outside. It turned out that even taking these kinds of pictures can lead to problems. The first tests in the city of Los Angeles revealed some specifics of this urban space and problems so far unknown. Although the few examined areas could have been easily reached by walking, it seems that the public space of Los Angeles holds places, which cannot be accessed without a car – a serious constraint when it comes to the method of the *dérive*.

5008 FRANKFURT/MAIN

Just lately, in June 2009, the first NSEW points of Frankfurt (N50°E08°) were documented. Despite the relative small area (248 km²) within its actual city limits, Frankfurt has an impressive skyline to offer. For example, the 240 m high Main Tower is a great place to view the town from the bird’s-eye view and to spot the routes to the roughly 100 NSEW points. Because of its status as a global city with many international headquarters, a distinctive financial sector and one of the most frequented airports of Europe, downtown Frankfurt is full of people in business clothes. But at the weekends, when business people leave the town, the city feels empty. Seen from this angle, the urban mood

of Frankfurt is ranging from hurly-burly to a nearly spooky emptiness.

WE ARE NOT ALONE!

Certainly, the hunt for spatial intercepts is not an exclusive 4816 monopoly. In the context of urban grids, the 'Chicago Mile by Mile' project of Neil Freeman should be mentioned¹¹. The scope of this project is set to the intercepts of the city's street grid. Chicago street numbers start at State and Madison downtown. State Street divides east and west addresses, and Madison Street divides north and south addresses. One mile is equal to 800 street numbers. The website of 'Chicago Mile by Mile' is documenting every intersection of mile streets – major roads on section lines – with a set of photographs that map Chicago's uncompromising grid into 2124 × 6" snapshots.

I didn't recognize any of Vienna. (Neil Freeman, 2007, while looking at the 4816-photos of Vienna)

Apart from the relatively small-scaled urban agglomerations, with a focus on the minute intercept points of the geographical coordinate system or – in the case of 'Chicago Mile by Mile' – on the built street grid, the Degree Confluence Project is directing its attention to the global scale¹². Similar to the 4816 concept, the Degree Confluence Project is about searching and documenting points of the geographical grid, in this case of the geographical longitudes and latitudes (called confluences). According to the project's webpage, more than 10,000 confluences are still waiting to be discovered. And the next confluence is within 49 miles (79 km) of you – if you are on the surface of Earth.

CONCLUSIONS AND OUTLOOK

The experiences gained from the fully elaborated 4816 project in Vienna and the tests in other cities reveal the similarities and differences of traversing different cities off the beaten path using the NSEW method. The collected samples offer images apart from social and spatial stereotypes, which illustrate another urban reality besides offensive communicated symbols – a reality of intermediate spaces. The example of the Dortmund Workshop reveals the importance of the participative component of the project. It clearly demonstrated that some kind of support and interaction makes sense and is promoting public dialogue, be it personal within a workshop or lecture, by participating at an exhibition or by maintaining a valuable web platform.

The urban space is the preferred habitat of our species these days and explorations are to a large degree part of the human nature. Consequently, it is an explicit target to spill over the NSEW method from Vienna to other cities and compare the results. After the first off-urban and cross-border expedition along the Austrian–Hungarian border in August 2009 as the opening of the Reheat Festival¹³, future plans include further tests in other cities like Santiago de Chile, as well as a deepening field study of Rio de Janeiro.

We are looking forward to further adventures along the GPS matrix.

BIOGRAPHICAL NOTES



Ramon Bauer (1969) is the NSEW spokesman and a geographer. He is working on the aspects of demography in the field of spatial and urban research at the University of Vienna, Department of Geography and Regional Research – Workgroup Applied Geography (<http://raumforschung.univie.ac.at/ramon-bauer/>).



Evamaria Trischak (1972) is the NSEW founder and an artist. She is a Viennese artist and computer scientist. She studied in Berlin, London and Vienna until 2002 and is now mainly working on art and cartography. She is the founder of the Viennese GPS-art-project 4816 and NSEW (<http://www.nsew.at>).

NOTES

¹ French avant-garde movement (1950s) around Guy Debord. For more info, see e.g. <http://library.nothingness.org/articles/SI/en/display/314> (accessed 22 May 2009).

² The website of 4816 – the Vienna based NSEW project – can be accessed online under <http://www.nsew.at>

³ <http://4816.nsew.at>

⁴ To assess a position employing a GPS device, it is necessary to have visual contact to at least four of the currently 31 active GPS satellites.

⁵ In contrast, the urban agglomeration of Paris with more than 11 million inhabitants is sprawling over more than 14,500 km².

⁶ For a description and a map of the original grid concept of the Eixample (from 1859), see Wikipedia: <http://en.wikipedia.org/wiki/Eixample> (accessed 22 May 2009).

⁷ Evamaria Trischak also participated at the exhibition WAVeS – the art of the electromagnetic science in Dortmund's Phoenix Halle, curated by Armin Medosch and Inke Arns of Hardware Medien Kunst Verein (HMKV). Link to the workshop: http://www.hmkv.de/dyn/e_program_events/detail.php?nr=3104&rubric=events& (accessed 22 May 2009).

⁸ Workshop documentation: <http://www.nsew.at/5107/> (accessed 22 May 2009).

⁹ <http://www.mobilefest.com.br> (accessed 22 May 2009).

¹⁰ The mega city Sao Paulo is the largest city of the southern hemisphere and has more than 11 million inhabitants (United Nations, 2008).

¹¹ See <http://www.fakeisthenewreal.org/milexmile/> (accessed 22 May 2009).

¹² See <http://confluence.org> (accessed 28 June 2009).

¹³ See <http://reheat.kling.org> (accessed 28 June 2009).

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