

METODY BADAŃ RYNKÓW W ŚRODOWISKU MIEJSKIM NA PRZYKŁADZIE WIEDNIA

THE MARKETS IN URBAN ENVIRONMENT: METHODS OF RESEARCH AND ANALYSIS (BY THE EXAMPLE OF VIENNA CITY)¹

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STRESZCZENIE

Badanie opiera się na przykładach z Wiednia, liczba rynków i ulic handlowych, które zostały zbadane w ilości 81. Celem badania jest definicja rynku jako zjawiska urbanistycznego oraz określenie jego typów spotykanych w mieście. Rynek jest badany jako organizm osobny w strukturze miejskiej i jako część jego przestrzeni publicznej oraz życia publicznego. Z tego punktu widzenia ważnym jest, w jaki sposób człowiek dokonuje kontaktu z rynkiem, jak on się zachowuje na rynku, jak długo pozostaje tam, czym rynek może zachęcić kupujących, oprócz handlu, do pozostania tu dłużej. Podsumowując, możemy powiedzieć, co sprawia, że rynek jest miejscem szczególnym w mieście.

Słowa kluczowe: metody badawcze, plac rynkowy, przestrzeń publiczna, rynek, środowisko miejskie, Wiedeń.

ABSTRACT

The article deals with methods of research of markets in the urban structure. The study is based on the examples of Vienna, the total number of markets and shopping streets that have been studied is 81. The focus is: what is the market in general and its specific types in a city. Market is studied as a separate organization in the urban structure and as a part of its public space and public life. In this approach, it is very important, in which ways a person takes contact with the market, how a person behaves there, how long it stay at the market, which ways runs a human paths through the market, whether the market attract buyers to stay here longer. In conclusion, we can say what makes the market a special place in the city.

Key words: market, market square, market place, public space, research methods, urban environment, Vienna.

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1. PROBLEM STATEMENT

A market, or marketplace, is an ordinary place where people gather to purchase and sell provisions, livestock, and other goods; it is a place where buying and selling occurs [1].

The market square (sometimes, the market place) is a feature of many European and colonial towns. It is an open area where market stalls are traditionally set out for trading, commonly on one particular day of the week known as market day.

A typical European market square is a square or rectangular area, or sometimes is just a wider part of the main street. It is usually situated in the centre of the town, surrounded by major buildings such as the parish church, town hall, shops, hotels, a post office, boutiques, and business premises. There is sometimes a covered market, and the entire area is a traditional meeting place for local people as well as a centre for trade [2].

The first meaning of the term "market" is close to the term "bazar," which translates from the Persian language as trading and also means a place of trading (usually outdoor).

Nowadays, the term "market" means an outdoor or indoor trading place, of any geometric shape and can be arranged in anywhere: in the city, in the countryside, in the central part (in the market square) or in the outskirts of the city. Markets can be either fixed or temporary (e.g., seasonal or weekend market). They can be built (even if the building is considered temporary) and they can be organized for a certain period of time (e.g., organized for a day and dismantled at night).

The second meaning of the "market" as the market square took its roots from the main square – the central location of trading place on the territory without buildings. That was quite logical given the fact that trade was one of the main functions of the settlements, along with defense. Market square as a central square of a town was present in all European cities from the Middle Ages to the XIX century. In this case, the meaning of the "market" is shifted from its function (trading) to the place (central square).

In Polish the term "market" (rynek) is often used to define the central market square. The term "market" (rynek) means the central town or city square – a space, which often does not have a trading function any more (since trading stopped there over a hundred years ago).

Although in German language a word "Markt" (lat. mercatus – trade) is used to describe the market, and the word Marktplatz for market square, the concept "rynok" in ukrinian and "rynek" in polish (eng. market) comes from the German "Ring" (eng. ring) which was first used on Ukrainian territory after the adoption of Magdeburg Law (Magdeburger Recht), which regulated social and legal relations in the city.

The city center looked like this: Town Hall (germ. Rathaus, pol. ratusz, ukr. ratusha) – the main administrative building – was in the middle of the square, it was surrounded by the square; this is where the word Ring (eng. ring) takes its roots. The square had the following main functions: governmental, judiciary, and trading (after adoption of Magdeburg Law, the city had the right to govern and trade independently).

In its function and organization, Market Square is most similar to:

- agora the main square in ancient Greece, where political, religious, and (sometimes) commercial life of the city was concentrated; sacred and administrative buildings, fountains, places for gathering and for speeches were also located there [3]; and
- Roman forum market and central area of most cities of that epoch; a place where two main streets, Cardo and Decumanus, intersected.

Another concept similar to market is fair (germ. – Messe) – a periodically organized event with folk festivals, tournaments, amusements, and, of course, trading. In Europe, Messe was popular in XI – XIV centuries [4]. In Northern Europe, on the Baltic coast in the XIII

century, Vitte was organized – a massive (up to 20,000 participants) herring trade [5]. Both of these phenomena could be regulated by a city, as an organizer, but they did not necessarily have to occur within its walls, rather the opposite – outside its borders given the great number of participants.

Nowadays, market square does not necessarily mean a trading square, but it is always located in the city center. Even if there are two squares, for example, an old and a new one, each of them is a core for certain urban formation (for example, old and new town). The market square today usually has the same basic functions as it did in the middle ages, maybe slightly reduced or modified. Trading may not appear in the form of the market, but may be often present symbolically, for example, a Saturday's fruits and vegetables market, or in the form of small shops, or a large shopping center (or Soviet CUS – Central Universal Shop), shopping streets, adjacent to the market square, passages that appeared in European cities in the nineteenth century.

In larger cities, there is often more than one market square with their own specialization, which sometimes is preserved in the name of the market: hay market, fish market, horse market, vegetable market, etc. These squares were formed based on the trading rather than administrative function, therefore, there was no town hall or a cathedral (however, a lower-ranking sacral building could be located there). In fact, it was a retail space, not a market-rynek-ring square. Sometimes they were initially formed outside of the city walls, because they required space and could complicate city life (for example, fish market required water and had production waste, and horse market required extra space). In some cases, the squares were constantly increasing and thus had to be moved outside of the city walls. Later, with the growth of the city, the squares again ended up on the territory of the city, but once again they were either moved or liquidated.

In Ukrainian scientific literature dedicated to market squares, are works by A. Rybczynskyy [6 - 8], to study of market squares in Renaissance cities and towns, are works by S. Topylko [9], to study of long markets of historical cities – by M. Kaplinska [10]. In the Polish scientific literature on theme of the Lviv market Square engaged F. Jaworski and A. Czołowski [11, 12].

Objective: to identify and analyze the types of markets in the city structure, to study methods of research and analysis of the markets in urban environment.

Which types of trading are there in the city?

Regular markets: they are situated in special fixed locations and have an operating schedule: week days and hours.

Market square: usually they are located in the city center and are the main or one of the main, historically established squares of the city. Trading is either constant or occasional, usually in the open space in temporary furnished commercial places, dismantled after the trading hours are over. Also in the market squares stationary trade may be present, i.e., shops (especially in the first floors of surrounding buildings), shopping malls, galleries and passages, leading to the square and pedestrian-only shopping streets (or pedestrian priority streets), which are located close to the square.

Shopping streets: the first floors of buildings on shopping streets are engaged in trading or catering, sometimes they function as art galleries or antique shops. They are typically pedestrian-only or pedestrian priority streets.

Shopping passages and galleries: are very similar to the shopping streets, but are usually shorter and blocked, they may pass through a building or a quarter and may be connected by intra-quarterly courtyards and passages, or they may be blocked and rather narrow streets.

Wandering markets: are held as short-term events, usually for 1-2 days, in different parts of the city, conveniently located for customers. Wandering markets can be held at

any square, street, parking lot, green area or a riverbank. Fairs, festivals, city day celebrations, one street festival, and other events, which can take place sporadically and are not linked to a certain territory, can be included in this category.

Single shops: are usually located on the first floor of residential buildings.

Single kiosks and groups of kiosks (up to 3-4): their location is usually linked to public transportation or places with high concentration of people.

Shopping centers: usually multi-storey buildings with a different set of shops, catering and entertainment places. They may be located in historical buildings and on the outskirts of the city and can also be built close to transport hubs (metro, train stations, etc.).

Suburban shopping centers: big-sized commercial spaces in hangar-type buildings, usually contains warehouses, parking lots and logistic areas.

Spontaneous retail: usually trading of homemade or self-farmed foods; it is located in crowded places (for example, near the public transport stops). Usually there are up to three vendors, but sometimes this type of market can become a bigger-sized one.

Trading in the city can take place either in the open air or in the building. In the open air, a large area of the city is activated. This group includes: markets, market squares, shopping streets, shopping passages, kiosks, spontaneous trade of small vendors, and temporary fairs and festivals. The second group (indoor trading) includes shops, department stores, shopping centers, malls, warehouses, galleries and passages (which because of its originality are present in both groups). Of course, this division cannot be very precise, because there are transitional types of trading, for example, a market situated in a building, or a gallery passes through buildings and quarters, involving urban space, balancing on the corner of the passage and the open air shopping street. In this article, more attention will be dedicated to the study of open air forms of trade in the urban structure. **The object of the study is:** market squares, markets, shopping streets.

2. RESEARCH METHODS

To make a proper market research one should know when market emerged: Old markets date back mainly to the World War I (the thirties of the 20th century), Modern markets appeared mostly after the 1970s. We can get Information on Old markets from literary sources, as well as from the study of toponymics. There are streets and squares in Vienna, which have clear signs that they served as markets: street Kohlmarkt (coal market) street Fleischmarkt (meat market), street Am Heumarkt (hay market) street Getreidemarkt (grain market).

When researching markets, one should pay attention to their location and accessibility. If you can reach a market in five minutes then its accessibility radius is 400 meters. If you need ten minutes to get to it, then the radius is 800 meters. If you can access a market-place by bicycle, the accessibility radius grows to 1200 meters for 5 minutes ride and to 2400 meters for 10 minutes ride (Fig. 1).

For comparison, the map of Barcelona markets. No matter where a pedestrian in Barcelona is, he'll be able to reach one of the city markets in 10 minutes (Fig. 2).

We usually consider streets, squares, waterfronts, parks and gardens, interior and exterior spaces of public buildings (such as railway stations, schools and universities, libraries, museums, health care facilities) as public spaces. Markets, though we often forget about it, also belong to the city public spaces.

As markets are public spaces of the city, we should refer in our study to the research of the public spaces from the Project for Public Spaces (http://www.pps.org), which introduced the following criteria of successful space:

Access and Communication: refers to two types of communication with the environment: physical and visual. Public space is efficient if it's easy to reach or leave it on foot, by public transport or by car. Efficient public space should be visible both from far and near distances.

- Comfort & General Appearance: public space will be popular if it's comfortable and good looking. Comfort comes from feeling safety. Public space should be clean and have enough places to sit (picking among many available places makes people feel comfortable)
- Purposes & Activities: activities are main building blocks for a public space. Having something to do gives people a reason to come back to the place again and again. When there is nothing to do, public space will be empty, which means that something is wrong.
- Sociability: it's not easy to make a place sociable, so that people could feel it, but if it's done it's a real success. When people see friends, meet and greet their neighbors, and feel comfortable interacting with strangers at a certain place, they begin to like the place more and more and feel growing attachment to their community and to the place which intensifies such types of social activities. [13]

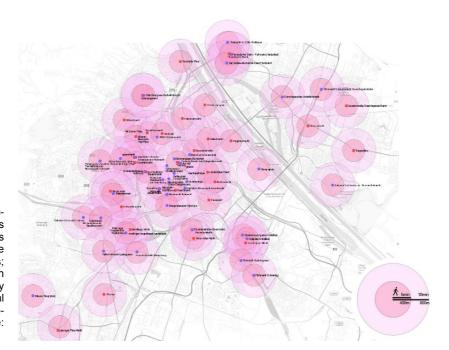


Fig. 1. Map of accessibility of markets in Vienna. Markets marked with red are permanent markets; markets market market wiolet are migratory markets, seasonal markets or occasional markets. Source: O. Kryvoruchko.

PPS developed **the Place Diagram** – the tool which helps people understand whether a certain place is good or bad (Fig. 3).

When studying markets as city public spaces, the following key questions will be of great interest for us: 1. How do markets function in a modern city, 2. How do markets influence the structure of public spaces of a city, 3. How do markets shape the environment around them and how do they transform city territory, 4. What do markets offer to the city and citizens other than fresh food.

In this article, we propose to analyze markets using the following **research criteria**:

- How much space does trading function use: the ratio of commercial and free space?
- How active trading function is: the ration of active and inactive trading units?
- How does public space operate at different hours of day and night?

- Are there weekly / seasonal changes in market operation?
- Is this market space mono- or multifutnctional: trade, catering, other functions?
- What activities can people do here: play, buy, eat, walk?
- Does this market have a convenient and comfortable space: are there any places to sit? Where are they: under the shade or in the sun, are there any water sourses, playing items?
- Authenticity of place: is there something special?
- Location identification: how can we identify this place?
- Attractiveness: are there any objects, which can increase attractiveness of a place,
 e.g. a fountain, shade, trees, cafe, etc.?
- Uniqueness: is there anything, which makes the place unique and which cannot be found elsewhere?
- Accessibility and ways to getting there public transport, parking places, bicycle lanes?
- Transit and passing: are there any transit paths pedestrians or bikers?
- Does the market interact with city environment: nearby cafes, shops, galleries, etc.?
- Who attends market area: buyers, residents, tourists, families, old people, etc.?
- Is the structure flexible: can trade equipment be moved? Can the space be increased/decreased, is it open/closed?
- Is there a critical mass of actions and people, is the space used inefficiently?
- What prevents to be successful?

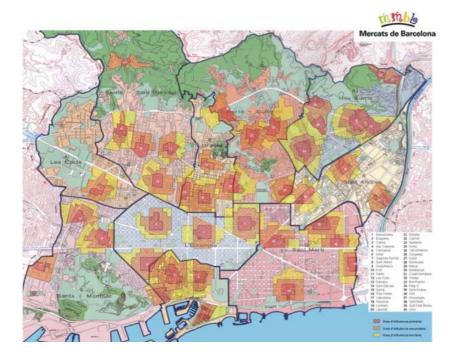


Fig. 2. 40 markets of Barcelona. Source: Public markets & community-based food systems. Making them work in lower-income neighborhoods. Prepared for: The W.K. Kellogg Foundation. Project for Public Spaces, Inc. Nowember, 2013.

The market is organized on certain days at the old central square: Freyung. This is one of the largest squares in Vienna downtown, situated between Am Hof and Benedictine monastery Schottenstift, and that's why it was originally called the Gegend bei den Schotten ("Schotten" was a name for Irish monks, who laid the monastery). From the beginning this square was used as a place for trade and public trials [14].

As an example, here is an **analysis of a temporary market Freyung, Vienna**. Now there are temporary open-air natural food markets and seasonal markets: Christkindl-markt (Christmas Market) and Ostermarkt (Easter market).

The Freyung market work depends on the season and on the day of a week. Fig. 4 and 5 presents general view of the market on weekday. The relatively large market functions here on Fridays and Saturdays. There are trade counters with cheese, wine and other food of local production. At once little tables emerge nearby where you can sit and eat. In total there are around 10-15 stalls, although there is place for more. Then people fill the area and it gets noisy and crowded there. Counters are installed along the perimeter so that visitors find themselves in a semi-closed space which, however, one can easily leave in any direction (Fig. 6-7). In the middle of this space there are tables and benches which form a kind of cosy courtyard market where people feel like on a common celebration. This is a matter of communication rather than purchases (Fig. 8).

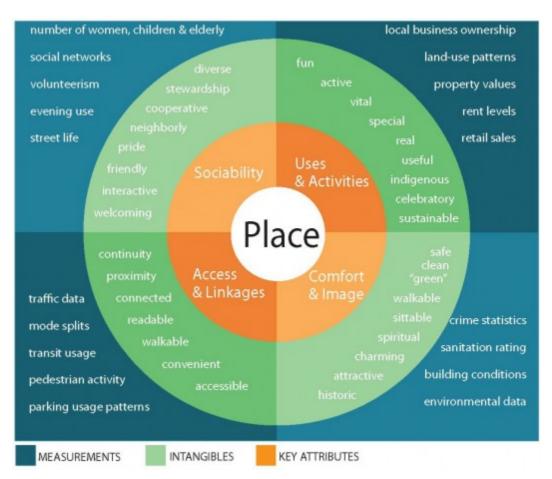


Fig. 3. The Place Diagram. Source: http://www.pps.org/reference/grplacefeat.

Geometric sizes of the squire are much bigger than of the market. Even in its most busy days, the market occupies only a part of the squire, about 1/3 of its total area.

Next pictures (Fig. 9, 0, 11, 12) illustrated the analysis of the market on the Freyung square in Vienna: on weekdays and on market days, Fridays and Saturdays. From these figures significantly how varies the use of space, how are passing human ways and how lively are same different parts of the square.



Fig. 4. On weekdays Freyung is rather empty area with a few passers-by. There is lot of free space. Fig. 5. A single seller of fruits early in the morning on weekday. Source: O. Kryvoruchko. Source: O. Kryvoruchko.





Fig. 6. There is a comfortable courtyard within the market $\,$. Source: O. Kryvoruchko.



Fig. 7. General view of the markets courtyard. Source: O. Kryvoruchko.



Fig. 8. These typical counters appear on Freyung on Fridays and Saturdays. Source: O. Kryvoruchko.

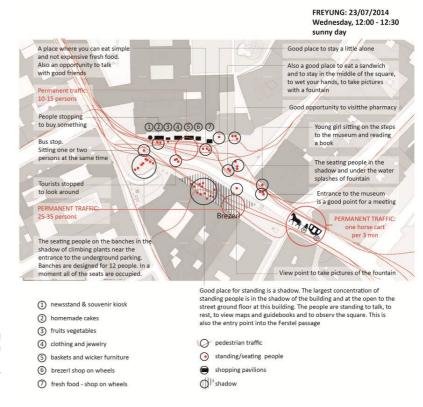


Fig. 9. Market Freyung on weekdays, when trade is not very active. Source: O. Kryvoruchko.



Fig. 10. Market Freyung on weekdays: shows how much area is occupied by market functions and how it effects on the transit pedestrian flows. Source: O. Kryvo-ruchko.

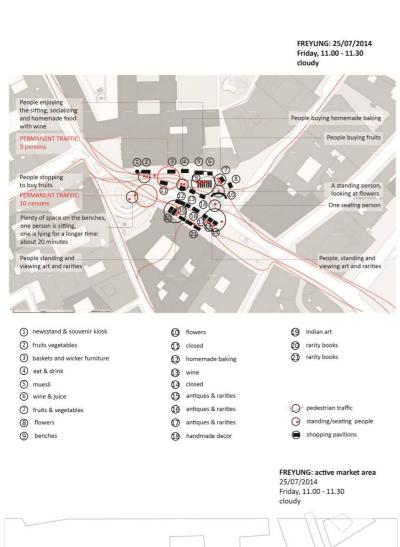


Fig. 11. Market Freyung on market days: Fridays and Saturdays, when trade is active. Source: O. Kryvo-ruchko.



Fig. 12. Market Freyung on market days: shows how much area is occupied by market functions and how it effects on the transit pedestrian flows. Source: O. Kryvo-ruchko.

Considering different markets in urban structure, we can find different types of markets:

- by number of visitors:
 - large (60,000 30,000 visitors per week),
 - medium (30,000 10,000),
 - small (8.000 1.000);
- by number of trading places:
 - large (200 70 commercial sites),
 - medium (70 20),
 - small (about 10);
- by planning organization:
 - market at a square,
 - street market,
 - market place (an open space in a town where a market is situated),
 - point-market (a small market consisting of several commercial sites),
 - spontaneous market or no-specific-place-market (has no permanent place, may be located in different places of the city; its planning is regulated according to situation (occasional and temporary markets));
- by work time:
 - permanent,
 - seasonal,
 - weekly,
 - spontaneous-migratory;
- by location in the city:
 - fixed place,
 - migrating;
- by equipment:
 - stationary,
 - portable;
- by building structure:
 - open-air markets,
 - indoor markets situated in special buildings;
- by production:
 - all goods with food market (bazaar): Brunnenmarkt in Vienna,
 - farmers markets or fresh food markets: Nashmarkt in Vienna,
 - fish markets: Feskekôrka in Gothenburg, Sweden
 - markets of art and design objects, handicraft markets: Museumsplatz Wamp Designemarkt, Museum Quartier, Vienna,
 - flea markets (flomarkt), antique markets: Flohmarkt am Nashmarkt, Atiquitäten Markt am Hof in Vienna,
 - flower markets: Bloemenmarkt in Amsterdam,
 - wet markets: mostly in China and Malasia.

By number of visitors per week and by number of trading places, Vienna markets fall into the following categories:

Table.1. Markets types by the number of visitors and trading places. *Source: "Die Presse", Print-Ausgabe, 22.05.2009 (http://diepresse.com/home/panorama/oesterreich/481137/Landstrasse_Comeback-der-Markthalle). **Source: Das Infoblat der stadt Wien, August 2014: Märkte

Large Markets		
by number of visitors per week	Brunnenmarkt/Yppenmarkt – 59.000* - 56.900** Nashmarkt – 58.000* - 66.000** Meislmarkt – 31.000**	

by number of trading places	Nashmarkt – 190 Brunnenmarkt/Yppenmarkt – 187 Meislmarkt – 73		
Medium Markets			
by number of visitors per week	Rochusmarkt – 23.000* - 28.600** Gersthofermarkt – 22.000* - 25.700** Hannovermarkt – 18.000** Meidlinger Markt – 14.000** Viktor-Adler-Markt – 11.300**		
by number of trading places	Meidlinger Markt – 55 Floridsdorfer Markt – 45 Rochusmarkt – 41 Volkermarkt – 22 Kutschkermarkt – 18		
Small Markets			
by number of visitors per week	Schwendermarkt – 8.000* - 12.400** Kutschkermarkt – 8.000* - 14.200** Nussdorfer Markt – 6.000* Volkermarkt – 6.000* Floridsdorfer Markt – 6.000*		
by number of trading places	Schwendermarkt – 8 Nussdorfer Markt – 8		

It's clear from Table 1, that markets with a small number of trading places, such as, Schwendermarkt (8 trading places and 8,000 buyers per week) can be actively visited. While the market with a big number of trading places (e.g. Floridsdorfer Markt, which has 45 retail trading places and 6,000 shopping visitors per week) can fall into the category of small markets.

By type of planning, Vienna markets fall into the following categories:

Table.2. Vienna markets by type of planning. Source: O. Kryvoruchko

Market square (market at the square): the square functions as an open city public space, the market occupies part of its territory; generally, such market emerges occasionally	Freyung, Am Hof, Markt Vorplatz der Kirche Mariahilf, Fasanmarkt, Allerheiligenmarkt, Lerchenfelder markt
Street market: extended market, mostly linear, situated along the street, occupies the street completely or partly	Brunnenmarkt, Hannovermarkt, Naschmarkt, Kutschkermarkt
Market place: an open space in a town where a market is situated, market occupies all or the vast majority of the area	Rochusmarkt, Karmelitermarkt, Floridsdor- fer Markt, Volkermarkt, Vorgartenmarkt, Viktor-Adler-Markt, Meidlinger Markt, Sonnbergmarkt
Point-market: a small market consisting of several trade spots	Schwendermarkt

Spontaneous market or no-specific- place-market: has no permanent place, may be located in different places of the city; its planning is regulated ac- cording to situation (occasional and temporary markets)	Kinderflohmarkt am Schrödinger Platz, Kinderflohmarkt am Donaukanal, der Soziale Bücherflohmarkt Floridsdorf
indoor markets: usually located in a large special building	Meislmarkt, Markthalle Nußdorfer Straße (supermarket today)

Table 2 shows that markets significantly differ according to their planning structure and location. Additionally, some markets cannot be categorized into a single group, they can take various forms, depending on day of week or season.

Urban functions of markets.

- There is a number of functions, which markets perform, some of them are unusual:
- supply of fresh food for urban inhabitants;
- creation of new work places, development of business and profit growth;
- involvement of farmers to urban life: communication with urban residents;
- revitalization of urban environment in a place where market is located as well as in surrounding areas;
- development of public spaces;
- attraction of new functions to a place where market is located as well as to surrounding areas;
- creation of new transport links: new pedestrian and bicycle paths, new public transport stops;
- creation of new communication opportunities for the citizens: meetings with friends and unknown people, discussion communities, interest clubs;
- creation of new opportunities for leisure time: walks, cafes, workshops, studios or artists shops, flea markets, garage sales, festivals, street celebrations, community days etc.;
- promotion of healthy food and lifestyle in the city.

3. CONCLUSION

The number of markets and shopping streets, which have been studied in Vienna, is: 30 are markets and market squares, 40 – migratory markets, which take place occasional and 11 – shopping streets. The main problem was how to study markets in the city. Among the parameters that have been used for the study were: quantitative (number of visitors, number of trading places), the location of the market place in the urban structure and market's interaction with the environment, specificity of the users behavior and the role of the place in urban life. Have been identified Vienna markets types by number of visitors per week, by number of trading places and by planning organization. Have been formulated urban functions of markets. The most interesting of them are: distribution of healthy food to the city inhabitants; revitalization of the urban environment; development of public spaces; attraction of new functions to a place where it is located and to surrounding area; creating new transport links; creating new communication opportunities for the inhabitants; promotion of healthy food and lifestyle in the city.

BIBLIOGRAPHY

- [1] Market a regular gathering of people for the purchase and sale of provisions, livestock, and other commodities. http://www.oxforddictionaries.com/us/definition/english/market?q=market [dostep dn. 12.08.2014]
- [2] Market square the market square (or sometimes, the market place) is a feature of many European and colonial towns. http://en.wikipedia.org/wiki/Market_square [dostęp dn. 12.08.2014]
- [3] Agora (gr. γορά, dosł. miejsce zgromadzeń) główny plac, rynek w miastach starożytnej Grecji. https://pl.wikipedia.org/wiki/Agora [dostęp dn. 12.08.2014]
- [4] Der Begriff Markt (von lat.: mercatus Handel, zu merx Ware) bezeichnet allgemeinsprachlich einen Ort... http://de.wikipedia.org/wiki/Markt [dostęp dn. 12.08.2014]
- [5] Eine Messe (in der Schweiz auch: Salon) im wirtschaftlichen Sinne ist eine zeitlich begrenzte, wiederkehrende Marketing-Veranstaltung. http://de.wikipedia.org/wiki/Messe [dostęp dn. 12.08.2014]
- [6] Рибчинський О., М. Каплінська. До питання регенерації ринкової площі Жидачева. // http://ena.lp.edu.ua:8080/bitstream/ntb/12624/1/040_Ribchinskij_241_247_716.pdf [dostęp dn. 16.08.2014]
- [7] Рибчинський О. Ринкові площі як головний публічний простір Галицького міста // Містобудування та територіальне планування: Науково-технічний збірник. (К: КНУБА, 2009. – Вип.33. - С. 364-37)
- [8] Рибчинський О. Архітектура забудови ринкових площ міст та містечок Галичини кінця XVIII початку XX століття // Збірник НУ "Львівська політехніка", "Архітектура". (Львів, 2001. -№ 429. С.174-177)
- [9] Топилко С. Архітектурно-планувальна структура містечок Галичини, закладених у другій половині XVI-XVII століттях. Автореф. дис. канд. архітектури: 18.00.01; Нац. ун-т "Львів. політехніка". Л., 2003. 18 с.
- [10] М. Каплінська. Довгі ринки в історичних містах Східної Галичини. // Збірник НУ "Львівська політехніка", "Архітектура". Львів, 2013. -№ 757. – С. 302-310.
- [11] Jaworski F. Z przechadzek po Rynku lwowskim (Kurjer lwowski. 1907. II. Dodatek świateczny. S. 15.)
- [12] Czołowski A. Historja Lwowa od założenia do roku 1600. (Lwów: Nakładem Koła TSL, 1925.)
- [13] What Makes a Successful Place? http://www.pps.org/reference/grplacefeat [dostęp dn. 18.08.2014]
- [14] Die Freyung ist einer der größten und bekanntesten Plätze in der Wiener Altstadt. http://de.wikipedia.org/wiki/Freyung_(Wien) [dostęp dn. 18.10.2014]
- [15] Werner T. Bauer, Jörg Klauber (photography): Die Wiener Märkte: 100 Märkte, von Naschmarkt til Flohmarkt. Mit einer umfassenden Geschichte des Marktwesens in Wien. Falter, Wien 1996.

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