

# The study of urban form in Poland

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**Abstract.** *Research on the historical geography of settlements in Poland has its beginnings in studies by economic historians at the end of the nineteenth century. During the inter-war period research on the geography of cities and on their historical geography in particular was developing slowly. Among works devoted to settlement geography, as many as nine out of ten were concerned with rural settlements. After the Second World War urban studies advanced considerably. Today the morphology of cities is a subject of interest to a relatively small group of researchers in Poland, Wrocław and Łódź being the only significant research centres. Morphogenetic studies of urban centres predominate. Metrological-historical studies have lost favour.*

*Key Words:* urban morphology, urban historical geography, urban structure, Poland

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The field of study now known as urban morphology had its Polish origins in the nineteenth century within urban historical geography. At the time, Poland was partitioned between Prussia, Austria and Russia. Progress in science in Poland was part of the wider development of knowledge occurring in the occupying states, mainly Germany and Austria. Early attempts were made at formulating topics within the field of urban geography. They were mainly descriptive and superficial in content – largely concerned with aspects of urban structure, directly visible externally. These included the physiognomy of town structure and building materials used for walls and roofs. Some historical context was provided. The work was mainly by researchers from Poznań and Cracow. They were influenced by the German school of geography, notably the work of F. Ratzel (1882, p. 605) and O. Schlüter (1899a, 1899b). This led to the popularization of the broadly defined topic of urban morphology. Early Polish works were those by the historians F. Bujak (1902, p. 221) and K. Potkański (1922-

1924, pp. 479, 478). They were concerned with both urban and rural settlements.

The first urban geographical research on Poland that had a solid empirical basis was arguably in the 1920s. It was influenced by research on urban landscapes in France at that time. Some studies, such as those by S. Gorzuchowski (1936a, 1936b) and S. Leszczycki (1932, 1936), utilized spatial statistics, while others, including the works of W. Rewieńska (1934, 1937, 1938, p. 144, 1939a, 1939b) and T. Kubijowicz (1927), focused on the physiognomic-functional layout of towns. The study of Cracow's division into historico-geographical and physiognomic-functional zones presented by M. Mrazkówna (1924) was the first of its kind in Poland.

Another popular research stream was concerned with the geographical and topographical location of towns, including the connection between location and the river system of Poland. These subjects were studied by M. Kiełczewska (1939) and M. Kiełczewska-Zaleska (1947a, 1947b, 1953), A. Malicki (1937), J. Dylik (1939) and others.

Z. Simche was also an important figure of the period. In 1930 he published a geographical monograph on the city of Tarnow, including a landscape plan (Simche, 1930). This study was considered exemplary at the time. Simche also created a methodological basis for the study of urban physiognomy (Simche, 1928).

The physiognomic approach was criticized in 1929 by urban historian O. Sosnowski as being too behavioural (Sosnowski, 1930). He recognized that the development of a city is a result of multiple factors – natural, historical, political, economic and social – and that a comprehensive analysis of urban structure required not only critical observation of the present, but also getting to know the historical development of a city, especially using historical maps and plans.

A reaction to Sosnowski's standpoint came at the end of the 1930s and was most clearly reflected in the study by O. Kossmann entitled 'Rys geograficzny planu miasta Łódzki' ('Geographical outline of the city plan of Łódź') (Kossmann, 1930), in which the city was divided into morphogenetic units, although the actual term 'morphogenetic' was not used at that time. The new approach was expressed on a larger scale in the works of W. Rewieńska (1938, 1939a) which was concerned with the typology of cities and towns in north-eastern Poland.

This promising morphological research stream came to a halt with the outbreak of the Second World War. After the war, in the new political and social reality of the communist period, studies of the geography of production became a preferred research path. Settlement studies, especially historico-geographical studies, were marginalized. Their gradual rebirth was related to the contribution of K. Dziewoński, an urban geographer, who not only incorporated within geography the achievements of urban historical studies, but also created the basis for the development of urban historical geography in Poland. He established the methodological basis of modern urban morphology in Poland in his work 'Zagadnienia typologii morfologicznej miast w Polsce' ('Issues in the morphological

typology of Polish towns') (Dziewoński, 1962), in which he systematized the terms used in this field of study and presented scientific postulates for the new generation of urban morphologists. Dziewoński claimed that up to that time two main tendencies could be distinguished in research. The first, traditional and more formal, focused on physiognomic urban features visible to the human eye. The second, more recent tendency, was morphological in a stricter sense. It focused mainly on the historical origin of forms. Dziewoński clearly supported the latter. Moreover, he also recognized the need to combine morphological and functional approaches both in empirical studies and in the classification of cities. Previously classifications and typologies, both morphological and functional, had developed independently of one another.

Dziewoński had earlier used a functional approach to morphological studies in his paper entitled 'Zagadnienie rozwoju miasta wczesnośredniowiecznego w Polsce' ('Development of an early-medieval town in Poland') (Dziewoński, 1957). He believed that early-medieval settlement in Poland reflected different functional types of settlements, which resulted from the increasing territorial and social division of labour.

A fully functional settlement pattern, which paved the way for future urban settlements, was represented by the so-called *zespół grodowy* (round-fort complex). This complex was divided into a main settlement – a *gród* (round fort) – which was a local or regional administrative centre and at the same time a strategic defensive point, and settlements located in the peripheral zone of the fort, providing various services to its inhabitants. The latter were called *podgrodzies* (suburbiums) and were occupied mainly by artisans. However, in larger round-fort complexes, there were also military and religious functions, which were usually surrounded by their own rampart systems.

Further social and economic development, resulting in the rise of a money economy and free trade, led to the creation of specialized market settlements. Such settlements were

located close to *podgrodzie* as a third element of the multifunctional *zespół grodowy* or as an independent settlement serving the surrounding rural areas. According to Dziewoński, there is a strong probability that the freedoms associated with a market place paved the way for territorial privileges, which were the foundation for town charters. Hence there is a tendency to refer to round-fort complexes and specialized market settlements as proto-towns or early-medieval towns.

From the morphological point of view, Dziewoński's statement that the *podgrodzies* (except the market settlements) were characterized by a non-plot layout was very important. The lack of a coherent spatial pattern of plots in a Polish early-medieval town was in striking contrast to a medieval chartered town whose spatial pattern was based on a regular pattern of burgages.

Another eminent scholar who played a major role in the development of Polish urban morphology, especially in empirical studies, was a geographer from the University of Wrocław – Stefan Golachowski. In the 1950s and 1960s he published a series of monographic works on Silesian towns – Opole, Gliwice, Bytom, Brzeg, Jelenia Góra, Racibórz, Głogów and Wrocław (Golachowski, 1957, 1969). In addition to consideration of topographical location, shape, plan, and land use, these studies examined the division of urban areas according to ownership, a previously unexamined aspect.

Golachowski's works on ownership units examined the origin of urban spatial patterns, exploring, for example, hypotheses concerning regularities in the planning of plot patterns in medieval Silesian towns and undertaking detailed measurements of the dimensions of plots. His deliberations on the origin of medieval Wrocław's plan (Golachowski, 1956) are a striking example. Golachowski can be credited with initiating in-depth studies of morphological units in Polish towns. In the 1960s he was much influenced by the ideas and methods of M. R. G. Conzen (1960), especially his concept of a burgage cycle.

Conzen's methods became more popular in Poland in the early 1960s, after the

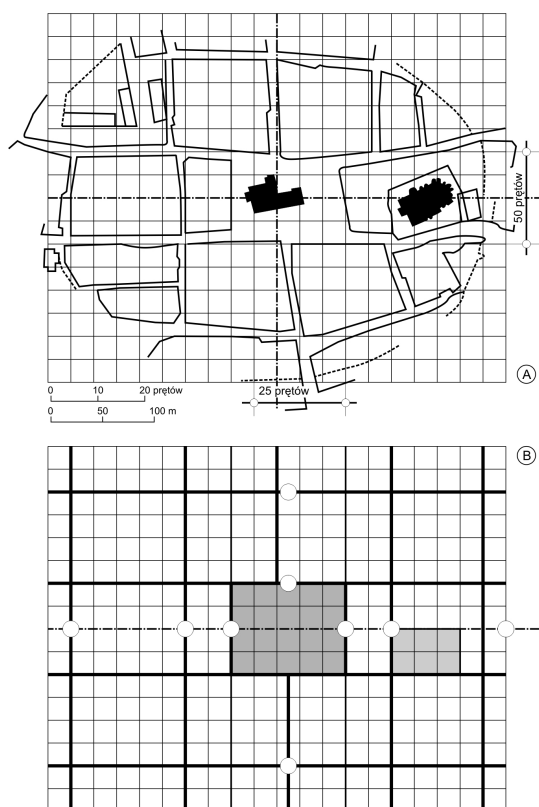
presentation of his paper on 'The plan analysis of an English city centre' at the IGU Symposium in Urban Geography in Lund, Sweden in 1960 (Conzen, 1962). His methods were quickly adopted, mainly in studies of the centres of Wrocław and Łódź.

The celebrations of the thousandth anniversary of the Polish state (966-1966), which began in 1963, stimulated the development of historico-geographical urban studies. Comprehensive studies of the beginning of the Polish state were conducted. For political and patriotic reasons, the studies were more advanced in the so-called Regained Territories, namely Silesia and Pomerania, which belonged to Poland in the early-medieval period, then to Germany, and were eventually recovered by Poland, after some 200 years, in the new post-war, geopolitical framework. The studies were based on documenting the Polish roots of these lands, including the origins of urban settlements.

These studies brought significant achievements, especially in Wrocław. Their most eminent representatives, in addition to Golachowski, include J. Pudełko. The studies focused on the origins of pre-chartered settlement forms and the planning of medieval Silesian chartered towns. Conzenian town-plan analysis was widely used, as Silesian towns had interesting, early-medieval and high-medieval spatial patterns and contained numerous architectural monuments. Moreover, in contrast to towns in other parts of Poland, many archival town plans from the seventeenth, eighteenth and nineteenth centuries were well preserved, along with iconographic materials from earlier centuries. This facilitated the study of the origins and planning of towns.

Pudełko should be credited with the greatest achievements in this field. He focused on conceptions of medieval chartered town planning, shapes and sizes of Silesian market squares and measurement modules used to delimit urban plots and street blocks (Pudełko, 1959, 1960, 1962, 1964, 1965, 1967, pp. 77-96).

Although the idea of planned, regular medieval chartered towns originated in



**Figure 1. Bolesławiec. A. Plan of the chartered town against the background of a theoretical modular square grid. B. Theoretical schema of a town layout based on Pudełko (1967, p. 28). The shaded areas are open spaces.**

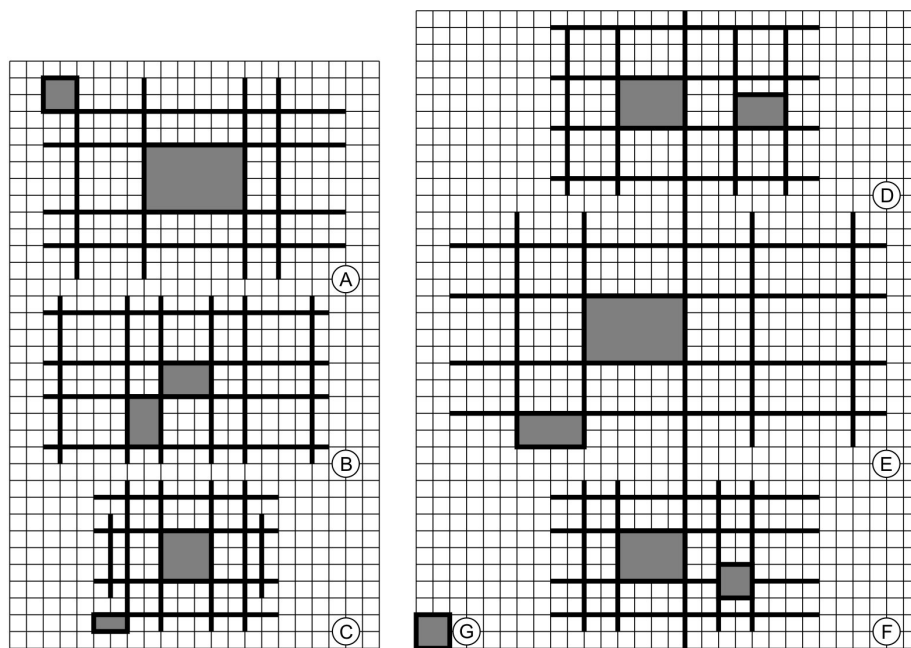
Western Europe, paradoxically most of such model patterns can be found in Poland and neighbouring countries. This reflected the fact that in the West many cities had come into existence earlier, so there the opportunities to implement the new models were more limited. In Poland, however, the distribution of older towns was sparse, so it could be supplemented with new chartered 'Gothic' towns, founded *in cruda radice* (from the very beginning), according strictly to the model concepts of a 'Gothic' town, albeit modified according to topographical conditions. Existing towns also presented opportunities for incorporating new features, including more regular layouts, as they suffered major damage during the Tatar raids in the early-thirteenth century. Despite this, the pre-chartered elements usually remained visible in these plans and gave rise to

distortions in the newly-implemented 'Gothic' town model.

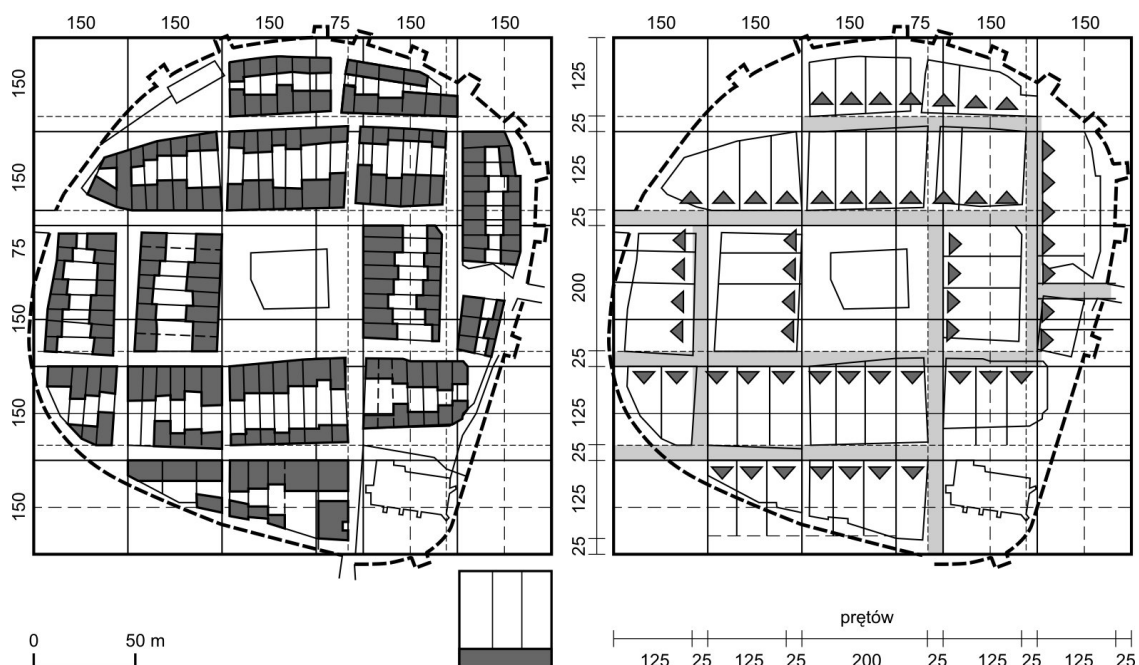
Through empirical studies, Pudełko worked out the original dimensions of urban plots and the most frequently used modules in creating plot series. He scaled these modules and created a grid of squares which, when overlaid on the medieval town plan, enabled the reconstruction of a model of the dimensions of urban plots and street blocks (Figures 1-3). In a similar way he reconstructed the size and proportions of the market squares of Silesian towns and recognized a typology. This was a very significant contribution to the method and theory of the study of medieval chartered towns.

A significant body of work has been concerned with *rozłogi miejskie* (urban tracts), that is urban, agricultural areas of medieval origin. In contrast to West European towns, medieval towns in Poland were to a large degree dependent on agriculture and had large areas of so-called urban tracts; namely fields, gardens, meadows, pastures and forests. This area was usually larger than that of the built-up area. The field pattern of these urban tracts was quite complex. Each townsman owned land in at least three main field complexes (the first field was normally used for spring crops, the second for winter crops, and the third was left fallow and used for pasture). As a result of major urban development in the nineteenth and twentieth centuries, urban tracts became largely built over. As a consequence, medieval agricultural boundaries have been incorporated in the layout of streets and plots, including in the largest Polish towns. The study of these patterns and the recognition of initial measurement modules was undertaken mostly by geographers from Wrocław. This topic was introduced in the work of S. Golachowski and H. Szulc (1963). These studies were expanded by J. Tkocz (1966a, 1966b), both in the form of detailed studies of the origin of the field patterns of urban tracts and in regional comparisons.

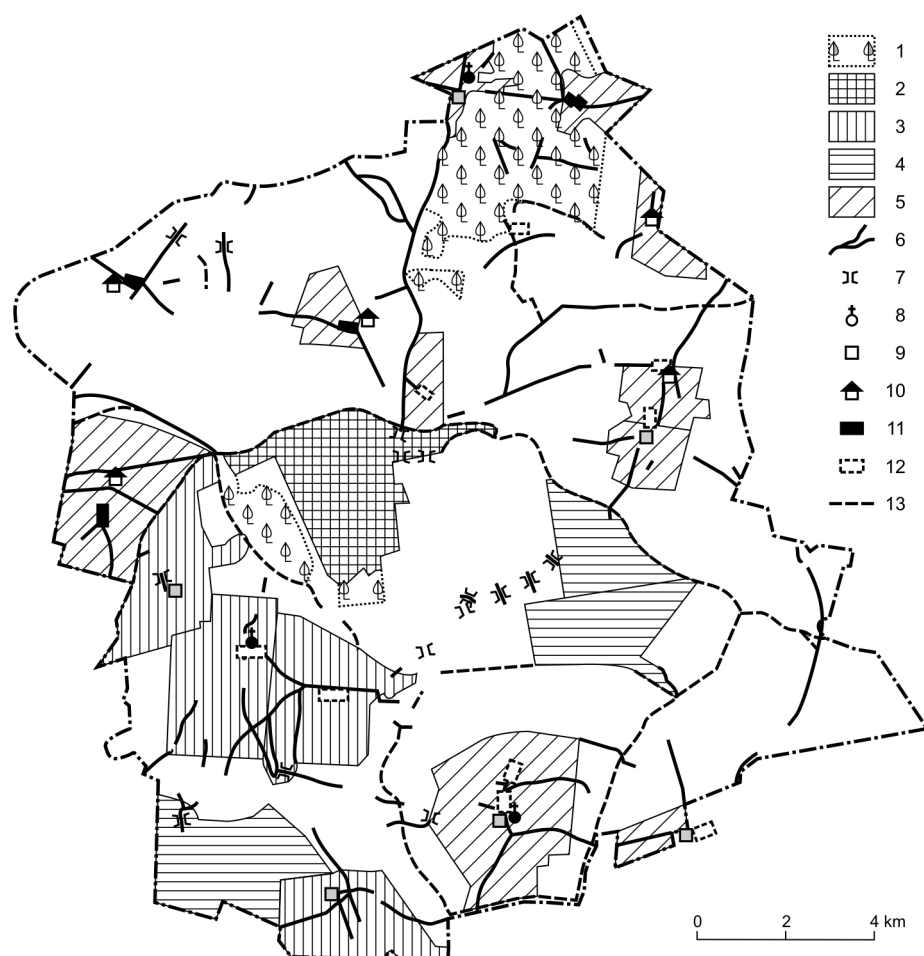
The research, initiated by the masters of the Wrocław morphological school, has been successfully continued by B. Miszewska. Initially, she analyzed urban network develop-



**Figure 2.** Comparison of compositional schemas of selected chartered towns, based on Pudełko (1960, p. 42). A. Kąty, B. Żmigród, C. Ława, D. Kamienna Góra, E. Namysłów, F. Radom. The shaded areas are open spaces (market places). G. Standard metrical module of open spaces.



**Figure 3.** Attempts to reconstruct the layout module of the city of Susz (Golachowski and Pudełko, 1963, p. 296).



**Figure 4. Relicts of medieval settlement on a map of modern Łódź (based on Koter, 1976, p. 686). 1 – forests and parks; 2 – medieval rural Łódź; 3 – medieval villages, reconstructed in the 1825-1840 period, with traces of previous layouts; 4 – medieval villages, reconstructed in the 1825-1840 period, lacking traces of previous layouts; 5 – medieval privately-owned villages, reconstructed in the 1870s and 1880s, with traces of previous layouts; 6 – relicts of medieval road system; 7 – ancient mill dykes and causeways, later used for road and street construction; 8 – sacred structures; 9 – relicts of ancient manor houses and granges; 10 – traces of ancient manor houses and granges; 11 – easily discerned relicts of village settlement; 12 – traces of ancient village settlements; 13 – ancient boundaries.**

ment in the Opole province using the graph model (Miszeńska, 1971a). Later she studied the morphological structure of Opole and Wrocław (Miszeńska, 1971b, 1979). Most recently she has been applying Conzen's burgage-cycle concept.

Another centre in Poland known for its comprehensive studies of urban morphology is

Łódź. Studies were initiated by M. Koter (1969). He described the formation of the spatial pattern of nineteenth-century Łódź, the main centre of the textile industry in Poland, in relation to local physical conditions and medieval settlement forms, both urban and rural. His later works concerned more detailed morphogenetic studies, which aimed at

showing the influence of medieval settlement forms on the planning of nineteenth- and twentieth-century urban areas and how these forms are still visible in present-day urban areas. His work on the role of rural morphological elements in the process of shaping Łódź's spatial pattern (Koter, 1994a) is one of many examples. His research was synthesized in his study of the morphogenetic structure of Łódź (Koter, 1979). It contains a contemporary map of the city, in which he identified features surviving from different periods (Figure 4). These included field complexes, medieval villages, eighteenth-century irregular 'Dutch' colonies, regular Prussian colonies, remote settlements of millers, innkeepers and foresters, glass works, and handicraft colonies of weavers and spinners. He also identified urban zones from different stages of industrial city development in the early-nineteenth century, as well as various residential, industrial and commercial districts that emerged in the late-nineteenth century and twentieth century. This study was greatly influenced by plan analyses of Alnwick and Newcastle by Conzen (1960, 1962).

One of Conzen's methods was widely applied in the study of the morphological evolution of the city centre of Łódź, between 1825 and 1973 (Koter, 1990). Koter showed that the Conzenian burgage cycle, previously recognized only in medieval towns, was a particular case of a more general cycle occurring even in urban areas of recent origin.

In addition to empirical studies, Koter made a number of contributions of a more theoretical nature. One of them (Koter, 1974) concerned terminological issues and included the specification of such terms as urban physiognomy, morphology and morphogenesis, which were often used ambiguously in Polish historico-geographical writing. Another work by Koter (1994b) addressed major theoretical issues in urban morphology. He also described the development of the scientific discipline of urban morphology. In analogy to historical geology, he introduced such terms as settlement stratigraphy, settlement periods and 'leading monuments' (historical buildings of different architectural

styles, which represent relevant historical periods, much as 'leading fossils' do in geology). In analogy to geomorphology, Koter suggested the term 'urbomorphology', which is gaining popularity in Poland.

M. Kulesza is another very active urban historical geographer based in Łódź. A historian by training, he is particularly interested in the origin of the spatial patterns of early-medieval towns and their influence on the planning of medieval chartered towns. His research has concerned, among other things, spatial patterns of market settlements in central Poland (Kulesza, 1999) and their visible remains in plans of different towns (Kulesza, 1994), as well as historical urban patterns in this area. However, Kulesza's (2001) dissertation on the morphogenesis of towns in central Poland during the pre-partition period (before the eighteenth century) is his most significant contribution. In this study, he showed that out of about 100 historical towns founded in this area, only two were founded *in cruda radice* and had the regular layout of a 'Gothic' town. The others derived from multifunctional, early-medieval round-fort complexes, former market settlements or former villages, whose remains were incorporated in the plans of chartered towns. From the point of view of Polish historical geography this is a very important finding, as the concept of a chartered town came to Poland from the West, through Germany. The basing of charters on German law had inspired some German scientists, especially during the Nazi period, to think that the foundation of Polish towns was a result of a German settlement movement. Though this occurred in the case of the first chartered towns, especially in Silesia which was pillaged by Tatar raids in the early-thirteenth century, this should not be considered to be the norm. Kulesza's studies established this fact beyond any doubt. The majority of towns in Silesia had pre-charter origins, as had been indicated by Golachowski and Pudelko (1963).

Among researchers who worked outside Łódź and Wrocław were S. Witkowski and J. Kubiak. The former mainly focused on the legacy of fixed assets in towns, examining the

case of towns in the Kielce province (Witkowski, 1962, 1967). Apart from studying the legacy of urban forms, not least architectural works, Witkowski also considered a wide variety of other fixed assets – residential, production, service-related and others. He proved that legacy is one of the main factors of the urban development process and that the creation of new values and their historical succession is embodied in the development of towns. J. Kubiak (1983), on the other hand, used Pudełko's modular grid of squares to reconstruct the bases of Toruń's medieval planning and proved that this method could also be used for towns in other parts of Poland, although the modules were different from those used in Silesia.

Although economic geography was regarded as of prime importance in geography during the communist period, urban morphology still managed to develop to a reasonable level and the current interest of students (including doctoral students) in this field of study augurs well for its further development.

## References

- Bujak, F. (1902) *Limanowa. Miasteczko powiatowe w Zachodniej Galicji. Stan społeczny i gospodarczy* Studia Ekonomiczno-Społeczne 1 (G. Gebethner i Spółka, Kraków).
- Conzen, M. R. G. (1960) *Alnwick, Northumberland: a study in town-plan analysis* Institute of British Geographers Publication 27 (George Philip, London).
- Conzen, M. R. G. (1962) 'The plan analysis of an English city centre', *Proceedings of the IGU Symposium in Urban Geography, Lund 1960* (Gleerup, Lund) 383-414.
- Dylik, J. (1939) 'Położenie geograficzne Łęczycy i Tumu', *Rocznik Oddziału Łódzkiego Polskiego Towarzystwa Historycznego* 3, 44-67.
- Dziewoński, K. (1957) 'Zagadnienie rozwoju miasta wczesnośredniowiecznego w Polsce', *Kwartalnik Architektury i Urbanistyki* 2, 441-57.
- Dziewoński, K. (1962) 'Zagadnienie typologii morfologicznej miast w Polsce', *Czasopismo Geograficzne* 33, 441-56.
- Golachowski, S. (1956) 'Głos w dyskusji nad genezą rozplanowania średniowiecznego Wrocławia', *Kwartalnik Architektury i Urbanistyki* 1, 23-8.
- Golachowski, S. (1957) 'Studia historyczno-geograficzne nad Wrocławiem na przełomie XVIII i XIX w.', *Sprawozdanie Towarzystwa Naukowego* Series A, 12, 3-8.
- Golachowski, S. (1969) *Studia nad miastami i wsiami śląskimi* (Państwowe Wydawnictwo Naukowe, Instytut Śląski, Opole).
- Golachowski, S. and Pudełko, J. (1963) 'O analizie metrologiczno-geometrycznej planów osiedli średniowiecznych', *Kwartalnik Architektury i Urbanistyki* 8, 287-98.
- Golachowski, S. and Szulc, H. (1963) 'Rozłogi miejskie jako przedmiot badań historyczno-Geograficznych', *Acta Universitatis Wratislaviensis, Studia Geograficzne* 1, 25-37.
- Gorzuchowski S. (1936a) 'Geneza i funkcje osiedli typu miejskiego', *Samorząd Terytorialny* 3-4, 34-67.
- Gorzuchowski, S. (1936b) *Osiedla miejskie w Polsce i ich materiał budowlany w zależności od czynników przyrody* (Powszechny Zakład Ubezpieczeń Wzajemnych, Warszawa).
- Kiełczewska, M. (1939) 'O położeniu geograficznym miast (Kalisza, Kota, Konina, Turka)', *Czasopismo Geograficzne* 17(2), 81-96.
- Kiełczewska-Zaleska, M. (1947a) 'O położeniu Torunia', *Czasopismo Geograficzne* 18, 247-61.
- Kiełczewska-Zaleska, M. (1947b) 'O miastach nadodrzańskich', *Morze i Odra Materiały VI Sesji Rady Naukowej dla Ziem Odzyskanych* 18-33.
- Kiełczewska-Zaleska, M. (1953) 'O położeniu topograficznym Poznania', *Geografia w Szkole*, 6, 13-24.
- Kossmann, O. (1930) 'Rys geograficzny planu miasta Łodzi', *Czasopismo Przyrodnicze* 5-7, 167-88.
- Koter, M. (1969) *Geneza układu przestrzennego Łodzi przemysłowej* Prace Geograficzne 79 (Instytut Geografii Polskiej Akademii Nauk, Warszawa).
- Koter, M. (1974) 'Fizjonomia, morfologia i morfogeneza miasta. Przegląd rozwoju oraz próba uściślenia Pojęć', *Zeszyty Naukowe Uniwersytetu Łódzkiego, Nauki Matematyczno-Przyrodnicze* Series 2, 55, 3-16.
- Koter, M. (1976) 'Relikty osadnictwa średniowiecznego w planie współczesnej Łodzi', *Przegląd Geograficzny*, 48, 667-87.
- Koter, M. (1979) 'Struktura morfogenetyczna wielkiego miasta na przykładzie Łodzi', *Zeszyty Naukowe Uniwersytetu Łódzkiego* Series 2, 21, 25-52.
- Koter, M. (1990) 'The morphological evolution of



- a nineteenth-century city centre: Łódź, Poland, 1825–1973', in Slater, T. R. (ed.) *The built form of Western cities: essays for M. R. G. Conzen on the occasion of his eightieth birthday* (Leicester University Press, Leicester) 109–41.
- Koter, M. (1994a) 'Rola wiejskich elementów morfologicznych w procesie kształtowania układu przestrzennego Łodzi', in Koter, M. and Tkocz, J. (eds) *Zagadnienia geografii historycznej osadnictwa w Polsce. Materiały Konferencyjne* (Uniwersytet Łódzki and Uniwersytet Mikołaja Kopernika w Toruniu, Toruń and Łódź) 63–88.
- Koter, M. (1994b) 'Od fizjonomii do morfogenezy i morfologii porównawczej. Podstawowe zagadnienia teoretyczne morfologii miast', in Koter, M. and Tkocz, J. (eds) *Zagadnienia geografii historycznej osadnictwa w Polsce. Materiały Konferencyjne* (Uniwersytet Łódzki, and Uniwersytet Mikołaja Kopernika w Toruniu, Toruń and Łódź) 23–32.
- Kubiak, J. (1983) *Teraźniejszość rzeczy minionych* (Ośrodek Informacji Konserwatorskiej, Warszawa).
- Kubijowicz, T. (1927) 'Z antropogeografii Nowego Sącza', *Prace Instytutu Geograficznego Uniwersytetu Jagiellońskiego* 8, 67.
- Kulesza, M. (1994) 'Ślady wczesnomiejskich osad targowych w planach niektórych miast wschodniej Wielkopolski', in Koter, M. and Tkocz, J. (eds) *Zagadnienia geografii historycznej osadnictwa w Polsce. Materiały Konferencyjne* (Uniwersytet Łódzki and Uniwersytet Mikołaja Kopernika w Toruniu, Toruń and Łódź) 89–101.
- Kulesza, M. (1999) 'Rozplanowania wczesnomiejskich osad targowych na obszarze Polski Środkowej (dawna ziemia łeczycko-sieradzka)', *Acta Universitatis Lodzensis, Folia Geographica Socioeconomica* 2, 71–96.
- Kulesza, M. (2001) *Morfogeneza miast na obszarze Polski Środkowej w okresie przedrozbiorowym. Dawne województwa łeczyckie i sieradzkie* (Uniwersytet Łódzki, Łódź).
- Leszczycki, S. (1932) 'Analiza fizjonomii miasta', *Wiomości Geograficzne* 10 (3–5), 60–3.
- Leszczycki, S. (1936) 'Typy fizjonomiczne miast polskich', *Samorząd Terytorialny* 8 (1–2), 65–76.
- Malicki, A. (1937) 'Położenie geograficzne miast na Nadbużu', *Czasopismo Geograficzne* 15, 18–42.
- Miszewska, B. (1971a) *Osiedla jako układy liniowe. Struktury i procesy osadnicze* (Państwowe Wydawnictwo Naukowe, Wrocław).
- Miszewska, B. (1971b) 'Analiza morfologiczna Opola', *Studia Społeczno-Ekonomiczne* 2, 180–217.
- Miszewska, B. (1979) 'Elementy struktury morfologicznej Wrocławia', *Acta Universitatis Wratislaviensis, Prace Instytutu Geograficznego* B3, 29–41.
- Mrazkówna, M. (1924) 'Antropogeografia Krakowa', *Czasopismo Geograficzne* 2, 43–67.
- Potkański, K. (1922–1924) *Pisma pośmiertne. Studia osadnicze*, Polska Akademia Umiejętności, 1–2, Kraków.
- Pudełko, J. (1959) 'Rynki w planach miast śląskich', *Kwartalnik Architektury i Urbanistyki* 4 (3–4), 56–69.
- Pudełko, J. (1960) 'Zagadnienie wielkości i proporcji rynków w badaniach nad rozplanowaniem niektórych miast średniowiecznych', *Zeszyty Naukowe Politechniki Wrocławskiej Architektura* 4 (36), 25–45.
- Pudełko, J. (1962) 'Niektóre zagadnienia rozplanowania miast średniowiecznych w świetle studiów nad układem Środy Śląskiej', *Kwartalnik Architektury i Urbanistyki* 7 (1), 23–45.
- Pudełko, J. (1964) 'Próba pomiarowej metody badania planów niektórych miast średniowiecznych w oparciu o zagadnienie działki', *Kwartalnik Architektury i Urbanistyki* 9 (1), 3–27.
- Pudełko, J. (1965) 'Ewolucja średniowiecznego miasta w Polsce', maszynopis w zbiorach Zakładu Historii Kultury Materialnej Instytutu Historii Kultury Materialnej Polskiej Akademii Nauk, Wrocław.
- Pudełko, J. (1967) *Zagadnienie wielkości układów średniowiecznych miast Śląska* Prace Komisji Historii Sztuki Wrocławskiego Towarzystwa Naukowego, Wrocław, TV (Wrocławskiej, Wrocław).
- Ratzel, F. (1882) *Anthropogeographie* (Bibliothek Geographischer Handbuecher Neue Folge, Stuttgart).
- Rewieńska, W. (1934) 'Bereza Kartuska. Wybrane rozdziały z antropogeografii miasteczka', *Prace Zakładu Geologii i Geografii Uniwersytetu Stefana Batorego w Wilnie* 11, 64.
- Rewieńska, W. (1937) 'Położenie topograficzne osiedli miejskich w północno-wschodniej Polsce', *Wiomości Geograficzne* 15 (3–4), 12–36.
- Rewieńska, W. (1938) *Miasta i miasteczka w północno-wschodniej Polsce. Położenie topograficzne – rozplanowanie – fizjonomia* (Stadium antropogeograficzne, Wilno).
- Rewieńska, W. (1939a) 'Miasta i miasteczka magdeburskie w województwie wileńskim I

- 
- nowogrodzkim', *Ziemia Lidzka* 3 (1), 132-56.
- Rewieńska W. (1939b) 'Rozmieszczenie miast i miasteczek w północno-wschodniej Polsce', *Przegląd Geograficzny* 18, 101-32.
- Schlüter, O. (1899a) 'Bemerkungen zur Siedlungsgeographie', *Geographische Zeitschrift* 5, 65-84.
- Schlüter, O. (1899b) 'Über den Grundriss der Städte', *Zeitschrift der Gesellschaft für Erdkunde* 34, 446-62.
- Simche, Z. (1928) 'O typach planów krajobrazowych miast', *Przegląd Geograficzny* 8 (1-2), 67-76.
- Simche, Z. (1930) *Tarnów i jego okolice* (Tarnów).
- Sosnowski, O. (1930) 'Powstanie, układ i cechy charakterystyczne sieci ulicznej na obszarze wielkiej Warszawy', *Studia z dziejów sztuki w Polsce* 2 (1), 4-32.
- Tkocz, J. (1966a) 'Geneza układu działek podmiejskich głogówieckiej niwy użytków specjalnych', *Kwartalnik Historii Kultury Materialnej* 14 (3), 112-35.
- Tkocz, J. (1966b) 'Z badań nad dziewiętnastowiecznymi rozłogami miast województwa opolskiego', *Kwartalnik Opolski* 1, 46-67.
- Witkowski, S. (1962) 'Dziedzictwo urządzeń trwałych w miastach', *Biuletyn Kwartalny Radomskiego Towarzystwa Naukowego* 6, 65-87.
- Witkowski, S. (1967) *Struktura przestrzenna miasta na przykładzie Radomia* (PWN, Warszawa).
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## Journal of Space Syntax

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