

New Geographies. Polish geographers facing the challenges of the present, the future, and interdisciplinarity

Abstract

This concise introduction discusses the proceedings of the 1st Warsaw Geographical Conference, held in September 2024 at the Faculty of Geography and Regional Studies at the University of Warsaw. Among the most significant scientific outcomes of this event are the seven papers published in this volume of *Miscellanea Geographica – Regional Studies on Development*. The research findings contained therein are briefly discussed below. They demonstrate the broad scope of recent geographical research in Poland, the multitude of topics addressed by researchers, and the relevance and strong standing of Polish geography.

Keywords

Geography in Poland • Warsaw Geographical Conference • new geographies • geographical research

Krzysztof Górny

Faculty of Geography and Regional Studies,
University of Warsaw, Warsaw, Poland
e-mail: krzysztofgorny@uw.edu.pl

The extraordinary history of geography, the transformations which our science continues to undergo – all this encourages reflection on geography, encourages us to seek new paths, stimulates solutions to more difficult problems and new formulations of its principles.
Stanisław Pawłowski in 1938

The 1st Warsaw Geographical Conference, 'Geography and its Challenges – Present Day, Future, Interdisciplinarity', was held on 19–21 September 2024 at the Faculty of Geography and Regional Studies, University of Warsaw. The conference brought together representatives of Poland's leading geographical research centres nationwide. This volume of *Miscellanea Geographica – Regional Studies on Development* features seven of the most outstanding texts selected from among those submitted to the editors as a result of the conference.

The Conference Organizing Committee aimed to initiate meetings between geographers from across Poland who actively participate in research and in the development of geography as an academic discipline, both domestically and internationally. The conference invitation was accepted by over 200 researchers who see their research as a response to the most serious challenges that Polish geography is facing today. Post factum, it is clear that the conference successfully created a platform for the exchange of experiences and ideas, which seek to provide remedies for contemporary and future challenges in geography. These experiences and ideas present geography as one of the most interdisciplinary in the entire constellation of natural, social, and technical sciences.

To remain competitive with other scientific disciplines, Polish geography (both physical and human), today more than ever, must effectively respond to the challenges of our surrounding reality. Only then will geographers be heard in public debate, and will geography-related fields of study attract many more excellent students. Contemporary challenges abound, stemming from both the dynamic present and an uncertain future. In physical geography, these include all changes in the natural environment, from the climate crisis to ecological disasters affecting Polish

rivers. In human geography, this primarily concerns responses to crisis situations (pandemics, wars – in Ukraine and in the Middle East), requiring effective planning of actions in the face of similar threats. Access to an increasing amount of spatial and remote sensing data is becoming a driving force for the development of geospatial algorithms for analysing Big Data, supporting data exploration, and searching for answers to many questions in contemporary geography. In turn, impactful cartographic visualizations are a means of communicating results to a wider audience. Perhaps the remedy for the above challenges is the interdisciplinarity still sought in geography, which, on the one hand, lies at the source of its classical division and, on the other, constitutes the vast margins where it meets other disciplines.

The aim of the 1st Warsaw Geographical Conference was to gather and compare the experiences of Polish geographers who are actively working in the fields that face the above-mentioned challenges in Poland and around the world, looking for new ways to study the dynamic present, trying to tame the challenges of the future, and operating at the intersections of various subdisciplines, and developing innovative solutions.

It appears that these goals were achieved. During the two days of on-site sessions, over 100 papers and seventeen scientific posters were presented. On the first day, the conference was officially opened by the Vice-Rector for Research at the University of Warsaw, Prof. Dr. hab. Zygmunt Lalak, followed by the Dean of the Faculty of Geography and Regional Studies and the conference's initiator, Prof. Dr. hab. Maciej Jędrusik, and the Chairman of the Organizing Committee, Dr. Krzysztof Górny. The twenty-one-member Scientific Committee was chaired by Prof. Dr. hab. Marcin W. Solarz. On the third day, participants took part in one of two tours of Warsaw. The event was held under the honorary patronage of the Mayor of Warsaw and the Rector of the University of Warsaw.

The opening day featured a plenary session entitled 'Geography and its Challenges', followed by twenty-one thematic sessions, including 'New Geographies', 'The World in the Eyes of Young Geographers', 'The Challenges of Public Transport', 'Spatial Data Visualization', 'Political and Historical Geography',

'Facing the Climate Crisis', and 'AI and Spatial Data'. Each session concluded with discussions and further informal conversations.

As mentioned, this volume features seven texts in which the authors address selected topics presented at the conference. Their diversity reflects the multifaceted nature of the conference and the richness of geographical research conducted in Poland.

Marcel Świerkocki evaluates public service accessibility across Warsaw's Municipal Information System (MSI) areas. His results show significant disparities between central and peripheral areas. MSI areas in the city centre, in districts like Śródmieście and Ochota, offer better access, while peripheral regions, such as Białoleka and Wawer, face notable deficiencies. This study highlights the importance of continuously improving the quality of life for residents of large cities.

Izabela Wilczyńska and Joanna Gac examined another Polish city's public transport challenges. The research subject was Wrocław, whose tram problems have generated intense media attention and are known almost throughout Poland. The authors demonstrate that the application of spatial data analysis provided valuable insights into the patterns and determinants of unplanned tram stoppages.

Matusz Zaręba, Szymon Cogieli, Elżbieta Węglińska, and Tomasz Danek explored another Polish city from a different perspective. The team examined machine learning models for air quality error mapping in Kraków. Their results indicate that DLinear achieved the lowest root mean square error (RMSE = 3.8 $\mu\text{g}/\text{m}^3$), followed by XGBoost (RMSE = 6.7 $\mu\text{g}/\text{m}^3$) and ARIMA (RMSE = 9.2 $\mu\text{g}/\text{m}^3$). These findings demonstrate the limitations of current prediction models and emphasize the need for spatially adaptive approaches to improve pollution forecasting.

In his article, Tomasz Studzieniecki discusses the impact of cross-border cooperation on tourism development in

Poland's border areas. Examining, among others, EU cross-border cooperation programmes from the 2014–2020 period, the author argues that all of these programmes contained provisions for fostering tourism development, and Euroregions played a significant role in encouraging tourism activities. These are extremely important issues, especially in the context of the increasing tensions surrounding Poland's borders in recent years.

In her article, Wiktoria Jackowska addresses the image of African countries in Chinese media, such as the China Global Television Network. This is a crucial topic, as geographers are increasingly focusing on narratives about a given place and the creation of its specific image. Her findings demonstrate that African countries are portrayed rather positively in mainstream Chinese media, which is related, among other things, to China's numerous investments in the continent.

Natalia Oniszczyk, in her study of tourism in Spitsbergen, demonstrates that economic development, climate change, and the resulting tourism have a significant impact on the natural environment of the islands of the archipelago. The researcher focuses on the inhabitants of this Arctic archipelago who come into conflict with the Norwegian authorities and various tourism organizations in their fight for a better future. The author examines these conflicts based on local media analysis.

Finally, Ada Górna and Krzysztof Górny describe the results of their research on the colonial and slave heritage in Ghana. The paper is the result of fieldwork in West Africa, during which they examined the contemporary development and functional use of forts and castles from the era of European domination. Over twenty of these structures still stand on Ghana's Atlantic coast, fulfilling various functions within the spatial and functional structure of dynamically developing cities.

References

- Górny, K & Górna, A 2026, 'Colonial forts and castles in twenty-first-century Ghana – spatial and functional layout in rapidly changing urban tissue', *Miscellanea Geographica – Regional Studies on Development*, vol. 30, no. 1, pp. 53–64.
- Jackowska, W 2026, 'Chinese narrative about Africa: Quantitative analysis of CGTN's online publications', *Miscellanea Geographica – Regional Studies on Development*, vol. 30, no. 1, pp. 42–44.
- Oniszczyk, N 2026, 'Dilemmas of the local community towards tourism in Spitsbergen', *Miscellanea Geographica – Regional Studies on Development*, vol. 30, no. 1, pp. 45–52.
- Pawłowski, S 1938, *Geografia jako nauka i przedmiot nauczania [Geography as a scientific discipline and a teaching subject]*, Książnica Atlas, Lwów & Warszawa.
- Studzieniecki, T 2026, 'Cross-border cooperation as a factor of tourism development in Poland's border areas', *Miscellanea Geographica – Regional Studies on Development*, vol. 30, no. 1, pp. 33–41.
- Świerkocki, M 2026, 'Mapping social inequalities: access to public services in Warsaw', *Miscellanea Geographica – Regional Studies on Development*, vol. 30, no. 1, pp. 7–14.
- Wilczyńska, I & Gac, J 2026, 'Unplanned tram disruptions in Wrocław: a spatial and cartographic analysis', *Miscellanea Geographica – Regional Studies on Development*, vol. 30, no. 1, pp. 15–23.
- Zaręba, M, Cogieli, S, Węglińska, E & Danek, T, 'Evaluating machine learning models for air quality error mapping in Kraków, Poland', *Miscellanea Geographica – Regional Studies on Development*, vol. 30, no. 1, pp. 24–32.