

Wojciech Mamak
Polish Academy of Sciences
wojmamak@gmail.com



Declaring Scientific Independence

Ludwik Krzywicki and the creation of modern
statistics in Poland (1912-1926).

ESHS Biennial, 14-17 September 2018, London
***Panel: Scientific Personae and the (Dis-)Unity of Modern Statistics
in Comparative Perspective, c. 1860-1960***

Overview

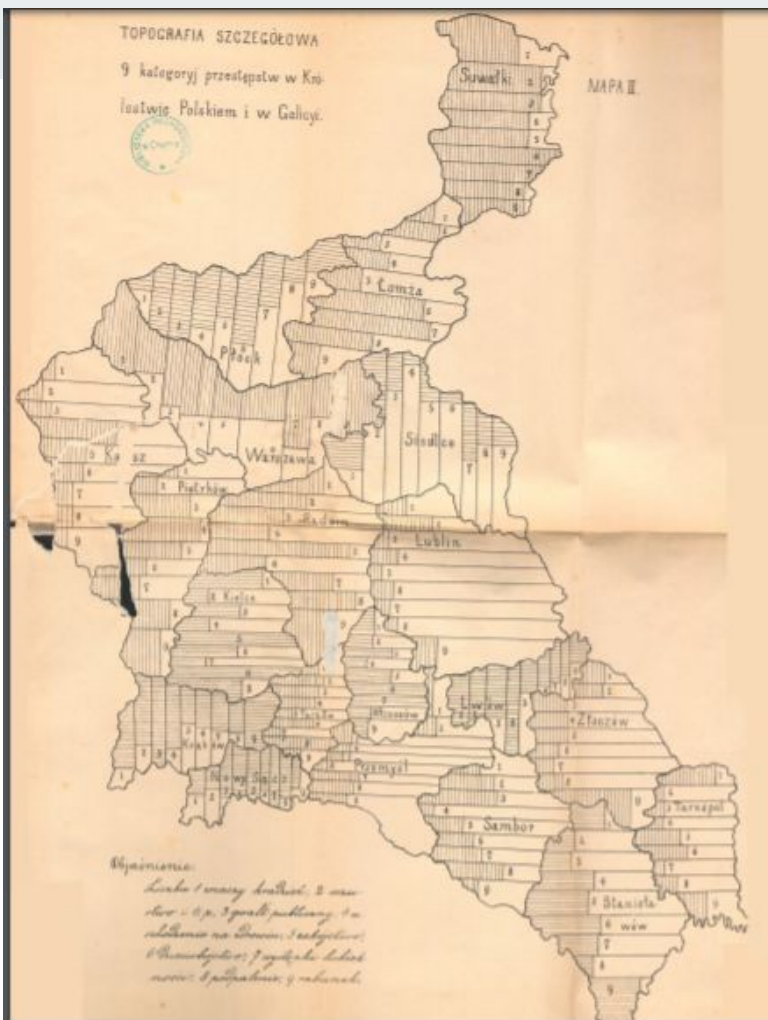


1. A view from afar: contextualization of problem.
2. Late to the party: coming of age of (belated) Polish statistics
3. Ludwik Krzywicki - not your everyday statistician
4. Three significant episodes
5. Conclusions and why it (potentially) matters

About the main project - contextualization



- **Project: 'A Proof Above All'. Growth of Statistical Thinking as a Shift in the Standards of Rationality in the (long) 19th Century Poland.**
- How, when and why quantitative ideas and techniques emerged, gained traction and established themselves in partitioned and then independent Poland?
- Who were the main actors responsible for this process?
- Period from **1912 onwards** - crucial (after slower transformations in 1860s and 1880s)
- Geographical boundaries: Congress Poland & Galicia
- Primary sources: **Archives of Central Statistical Office's** (GUS) General Division, **memoirs** (Krzywicki, Krzywicka, Michrowski) **reports** (Szulc, Buzek, Szturm de Sztrem), **Krzywicki's letters**: + secondary materials on statistical institutions in the Second Republic (Domański 2008; Berger 2008, Labbe 2015).
- **Work in progress**



Source: Roman Buczyński, *Zarysy stanu moralnego naszego społeczeństwa* (vol. 1), 1885/6)

A change in (statistical) landscape:

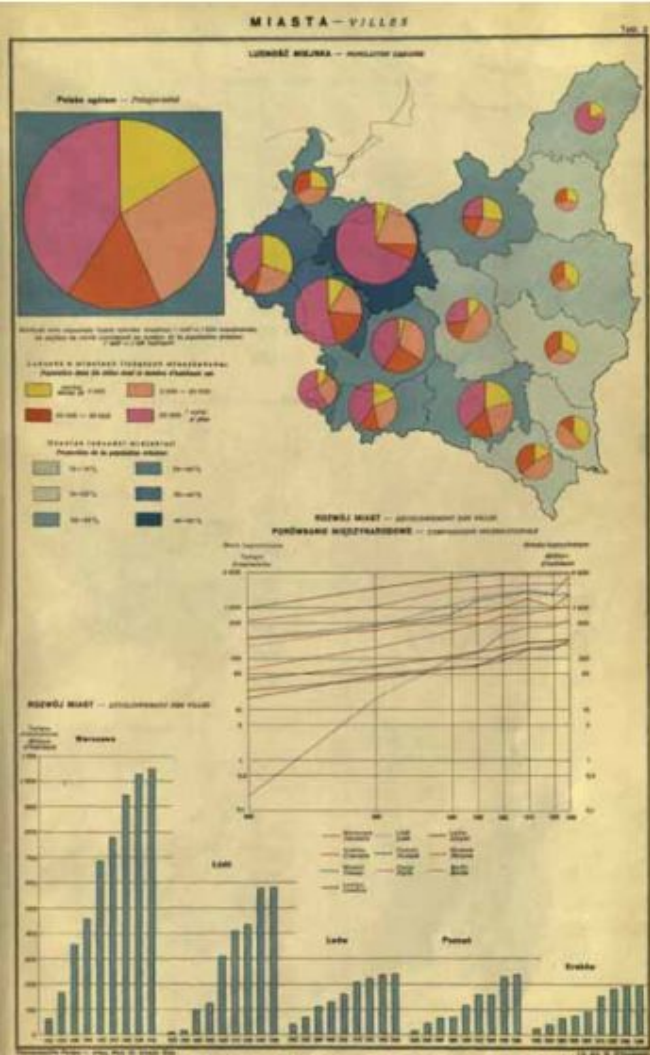


1860s-1910s

- Lack of statistical milieu, few professionals (Piłat, Załęski - exceptions, not rule)
- Lack of adequate institutions
- Publications scattered and neglected
- Public **mistrust** towards state numbers
- '**Mathematical acrobatics**' (Zakrzewski 1888)
- **Secrecy & uncooperativeness** of state
- Statistical enterprises undertaken by **amateurs** (Marasse, Szczepanowski, Buczyński)
- Three partitions **disconnected** from each other
- **Metrological madness**
- **Belatedness**: slow travel of ideas
- Awareness of that

Post-1912

- Polish Statistical Society (1912)
- Tripartite '**Statistics of Poland**' (Kumaniecki&Krzyżanowski; 1915)
- 'L'Encyclopédie Polonaise' (Piltz 1916)
- First handbooks:
 - statistics - **Grabowski 1917**;
 - anthropology - **Krzywicki 1908**; Czekanowski 1913
 - mathematical economics - Zawadzki 1914
- **Romer's trilingual "Geograficzno-statystyczny atlas Polski"** (*Geo-statistical Atlas of Poland*. 1916) [Górny 2017]
 - national statistics mobilised in WWI peace talks
- 'Professors' War' [Górny 2014]
- **Central Statistical Office (1917)**
- **Socio-Economic Institute (1926)**
- Anthropometry: Rosset [Ogórek 2016, Mogilner 2015]]
- Poznań School of Economic Historians: Taylor, Rutkowski, Caro)
- Mathematical statistics: Neyman, Smoluchowski



Source: Statistical
Atlas of Poland 1930



An explanatory gap?

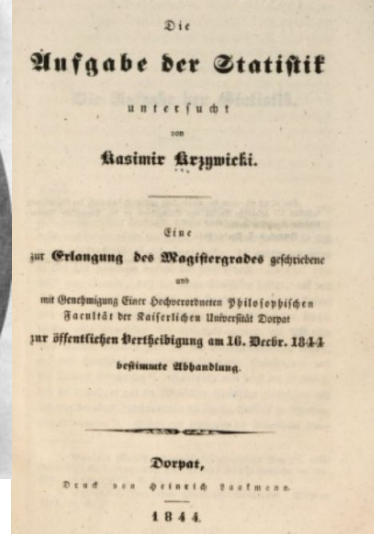


- How did this acceleration in quality, quantity and breadth of statistical work happen and why?
- Two possible hypotheses:
 - **State-building/Nation-building**
 - **Impact of leading scientists (Romer, Rosset, Czekanowski, Kumaniecki, Twardowski, Steinhaus)**
- Krzywicki - in the midst of these processes. Personally co-responsible for the self-dubbed '**setting a direction**' for national statistics and corollary disciplines. Also - a unique career, exemplary of the coming-of-age of Polish statistics (1860s-1920s).
- Where did this 'direction-setting' lead? What was Krzywicki's role in this process?

Ludwik Krzywicki (1859-1941): an unlikely statistician



- Not to be confused with Kasimir Krzywicki - a German statistician
- Studies **mathematics** on Tsarist Warsaw University
- Active member of **socialist circles** since formative years ('Krusinszczycy')
- Establishes himself as a **major polemist** during the 1880s - attacks on positivists (Prus, Świętochowski, Chmielowski: 'the Elders'), conservatives ('Głos' magazine), Catholic writers
- Embraces **Marxist** ideas and methodology - first Polish translation of the Capital (1st vol.)
- Consistently left-leaning for the entirety of his life - ethos of **social solidarity**: 'reciprocating the society'
- **Exile** (1883) and subsequent Grand Tour (Wundt, Roscher, Avenarius, Luksemburg, Kautsky, Engels)
- **Conspiracy, revolutionary** movement (Union of Polish Workers; *Związek Robotników Polskich*) upon return (1885), married 1886; 1891 re-exiled - Berlin, London, the States
- Twice **imprisoned** (1899-00; 1905)



Biography - continuation



- Declaration of dedication to science - ~1895 (Zawiszewska 2017)
- PhD as late as 1906 - for work on Kurpie
- *magnum opus* - '**Horda pierwotna**' (*The Primordial Horde*)
- Scholarly interests and accolades - mainly in **anthropology**, **ethnography** (Samogitia) and **sociology**
- **Long-lasting activity** in illegal conspiratory (legalised post-1905) education - e.g. Flying University (Uniwersytet Latający), Society for Educational Courses (Towarzystwo Kursów Naukowych) - mostly marxist theory and sociology; ethos of engagement and responsibility -> intelligentsia (Janowski 2016)
- **Reputation as a social activist** equally influential as an intellectual
- Influential **disciples** (later: peers) - e.g. Lange, Kalecki
- Cements his position as the most important and venerated socialist thinker on the turn of century; a Nestor-like figure

- But - never considered himself a statistician (see: Krzywicki 1957)

- **Non-statistician and a leading figure in Polish modern statistics?**



Three significant episodes

- Establishing the **Central Statistical Office**
[*Główny Urząd Statystyczny*; Buzek 1930;
Berger 2008; Jagodziński 2017]
- Discussions around **Brest peace talks** in the Society of Polish Economists and Statisticians (*Towarzystwo Ekonomistów i Statystyków Polskich* - **TEiSP**) in 1917
(Czarnowska 1992; Jopkiewicz 2011)
- Kickstarting and leading the **Socio-Economic Institute** (*Instytut Gospodarstwa Społecznego*) [Szturm de Sztrem 1959; Strzelecki 1960]



Establishing the Central Statistical Office (GUS)



- Krzywicki - chosen by the Civic Committee of Warsaw in 1915 to oversee the transition from abandoned Russian statistical committee to a new, national operation
- Project of a new **Central Statistical Office** (GUS with J. Rutkowski) in 1917 even though the outcome of the war and the shape of a new country are unknown - strong conviction that national statistics will be **essential**
- Great focus on Office's independence (from the Ministries) and control over all statistical work in the nascent country; strive to **centralization** - unification of procedures, monopoly on publications, no local statistical authorities; breaking any local resistance (i.e. Liquidation Commission)
- **Power struggle** with the Ministries (and Industry and Agricultural Unions) for competences, scarce manpower and finance; Krzywicki's arguments - not all numerical information are statistics
- Centrality motivated by the **lack of traditions and chaos** - Germany indicated as a model country
- Krzywicki conjures the authority of “**most recent advances in the science of statistics**” (GUS 1918:31)
- Krzywicki's (and Buzek's) personal authority crucial in securing GUS's independence and oversight
- Arguments: not all numbers-gathering=statistics; basic operations allowed; regulated by two-party contracts
- Presented motivation: to chart the unknown territory (state of the country) and rein in local traditions
- Envisioned role of statistical officers: **leading**, (guidelines of collection and control over data) **but only auxiliary** - to provide a clear picture for others to act upon
- **Quits in 1925** to focus on academy and transforming the Socio-Economic Institute

Taka statystyka wynika samorzutnie z samodzielności Ministerstwa, wysuwana z jednej strony zapotrzebowaniem, z drugiej strony podadą pracy. Wogóle byłoby bardzo za utworzeniem G.U.S., to biuro miałoby za zadanie ujednolicienie metod prac statystycznych w porozumieniu z poszczególnymi Ministerstwami, które mogłyby komunikować mu rezultaty swoich badań. Ale z natury rzeczy, nie jako wyjątek, ale jako zasadę, postawiłbym, że potrzebne jest zajmowanie się statystyką w poszczególnych działach Ministerstwa pracy. Dlatego też zgodziłbym się zupełnie na sformułowanie p. Rygiere, może z niejakimi poprawkami. Natomiast ustęp w projekcie, który mówi o dopuszczeniu w drodze wyjątkowej badań statystycznych przez inne urzędy, przewiduje potrzebę uzyskiwania oddzielnych ustaw po temu, wydaje mi się zupełnie niepotrzebny.

Prof. Krzywicki. - Ponieważ jutro poniekąd współtworzącą tego projektu, przeto obiecałbym dać pewne wyjaśnienia. Najprzód co do powoływania się na inne państwa: statystyka administracyjna wytworzyła się wcześniej, niż świadoma myśl naukowa statystyczna zajęła się organizacją tej pracy. Dlatego w państwach starej daty mnóstwo urzędów uprawia badania statystyczne: we Francji np. 47 różnych wydziałów na swoją rękę prowadziło statystykę i wyrzekać się tego nie chce. Wytworzyły się tam stosunki nienormalne i zamęt kompletny. Natomiast państwa nowej daty, które tworzyły statystykę według zasady, postawionej przez kongresy międzynarodowe, poszły w kierunku centralizacji, mianowicie: Niemcy, Węgry i Włochy, częściowo Rosja /choć centralizacja była tam tylko na papierze, a w istocie panowała najwyższa decentralizacja, tak dalece, że Komitet Centralny nawet konfiskował wydawnictwa Warszawskiego Komitetu i chował pod klucz na lat kilkanaście/. Powoływanie się zaś na Anglię nie jest miarodajne: tam są dobre prace statystyczne, ale kiepska statystyka jako całość. Idzie o to, w jaki sposób właściwą centralizację przeprowadzić u nas, t.j. taką, która by nie podważała inicjatywy ministerstw poszczególnych, a jednak zapewniała jednolitość. Chodzi najpierw o usunięcie nieporozumienia, które uprości rzecz. A mianowicie, nie wszystko jest statystyką, co tutaj podczas dyskusji podciągnięto pod statystykę.

Discussion on the formation of Central Statistical Institute 5 III 1918 led by Krzywicki

lista obecności.

Narada w sprawie projektu organizacji Centralnego Biura
Statystycznego, dn. 5 marca 1918 r.

- H. Ziętewski
- J. Jędrzejowski
- Szymon Kramarski
- A. Ostrowski (ok. M. Polnietowa)
- W. Jaborowski (min. spraw)
- B. Hornowski
- J. Kurlinski
- A. K. Zembrowski - Min. Przemysłu i
Handlu
- J. Jędrzejowski
- M. Kieniewicz - Dyrektor Urzędu Zmian Publicznych
- H. Rygiere - Ministerstwo Osiedleń
- E. Grabowski. (Tzw. Statyst. Ekonomicznych)
- E. Krzywicki

[source: GUS Archives, General
Division, box VI, 31; 42]

Pre-Brest Treaty Discussions in the TSEiP (December 1917)

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- Temptations are immense for the members of scientific circles to put their ideas into marking the new borders -> Romer, Daszyńska-Golińska, Krzyżanowski
 - NKN's (a coalition of Galician parties set up in 1914 intended to become a new government for Poles in a new trialist Austro-Hungro-Polish monarchy) leader was a statistician, head of 1912 Polish Statistical Society - **Juliusz Leo**
 - Members of diplomatic delegations participate in the discussion along ministers, academics and members of various Societies (Agricultural, Industrial); the outcomes of discussions sent to PM Kucharzewski
 - Krzywicki's not impressed by colleagues' fervour. His stance is different - he advises to abstain from any geopolitical projections based on academic (economic) discussions
 - Krzywicki's position is that the peace talks should be held on purely political terms

Socio-Economic Institute (IGS)

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- Initially part of TSEiP, accepts state contracts
 - headed by W. Wakar (briefly), in 1921 Krzywicki asked to step in; the IGS's **mission**: a mirroring of his socialist views on valuable research questions; **since 1926 independent research facility**
 - Joblessness, social insurance, local and union self-government, home budgets, real wages
 - Main objective - identifying and assessing the scale of social problems, critique and **formulating policy changes** - **active and successful cooperation with trade unions** (arbitrage in 1927 textile strikes)
 - Hundreds of **field questionnaires** - mostly on working conditions of workers and most-challenged members of society
 - Pathbreaking research - **memoir-contests** in the 30s (the jobless, farmers, emigrants) - published and analyzed, hugely popular

Long-lasting impact of Krzywicki's IGS

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- The mode of Institute work was a direct realisation of Krzywicki's will, his reputation as a scholar and activist - an incentive for high-profile scholars to cooperate [Strzelecki 1960: 220-228]
 - Spin-offs: Instytut Badania Koniunktur Gospodarczych i Cen (*Institute for Economic Cycles and Prices Research*; E. Lipiński; 1928) Instytut Spraw Społecznych (*Institute of Social Matters*, 1931)
 - Cooperation offered to state - joint Komisja Ankietowa Badania Kosztów i Warunków Pracy i Cen (*Questionnaire Commission on Costs and Conditions of Productions and Prices*)
 - The tradition of this way of thinking lived on in the work of economists of underdevelopment such as Lange, Landau or Kalecki; their later economic models were based on Polish experience and used abroad, e.g. India (Mazurek 2015)

Krzywicki - a scientific persona? Recapitulation.

- A self-proclaimed duty of activity as **intelligentsia's** reciprocation to working class
- Separation of 'pure' statistics (as a technical matter) from economics and social science, quantitative tools still aplenty
- Krzywicki not interested in participating in the statistical service - as proved by his choices post-1918
- A major **scholar (and comrade)** should be as accessible for the younger ones as possible - **open house** in the 1920s and 1930s
- Against narrow specialisation - a wide array of disciplines and research questions; object of inquiry **remained intentionally general**: a man and laws of historical development of human societies
- This **image of a polymath** and '**old-school habitus**' was one of roots of his sweeping authority in the 20s-30s; the only major actor of 1880s discussions still active in the 1930s
- From *intellectual/scholar to scientist*? Pending quantitative verification.
- Other “virtues” named by disciples: **veterancy, engagement, mentorship, discipline (but not monkish), poetic fervour, moral clarity** [Borowski 1925, Krzeczowski 1938; Krzywicka 1951]
- Lack of interest in more direct participation official politics - as a person actively involved in political movements for the entire life and living in an increasingly politicized Post-May Republic with many acquaintances in positions of power

Conclusions

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- A **symbolic biography** - revolutionary turned into high state official. An outcast, then a major authority. A non-statistician put forward as the state's top statistician. An academic late-bloomer. Krzywicki's career and position bridges the ideal of polymath-publicist not attached to any official position with the rapid professionalisation and petrification exemplified by creating new structures of statistical order of the new country.
 - Krzywicki's career and position **explains the statistics' only ancillary position** until the 1910s and its closure in technicality afterwards.
 - Krzywicki **personally influenced the shape of this order**. Both by his individual actions - i.e. power struggle around GUS's conception and its mandate also through his promotion of particular research questions (roughly - socialist), methods (combination of quantitative and qualitative) and motivation (social change) that **persisted in the milieu of Polish economists and social scientists** in the 30s and onwards (Post-War People's Republic of Poland).
 - All said - it is unclear (doubtful) whether the notion of persona is useful as a main causal explanation capable of filling the explanatory gap.
 - But it is a **useful tool** for conceptualising the impact of one of the main actors in the conception of modern statistics in the Second Republic of Poland

Thank you for your
attention!



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