

Introduction

In early November 1956 Katalin Parádi emerged from the shelter beneath her house near Corvin Köz, Budapest. Surrounded by buildings peppered with bullet holes, the remainders of a barricade, a broken-down tank and dead bodies scattered on the ground, she was shocked by the scene, where one of the most notorious bloodbaths in the revolution had taken place. The alley that was once known for its lively cinema was now a battlefield. However, the young girl was determined to make her way through the destruction. The 17-year-old Katalin had an appointment for post-operative physical therapy treatment in the nearby children's hospital. She was recovering from polio.

It had started one morning in the summer of 1945 in Budapest, when the six-year-old Katalin became feverish. Her parents suspected the flu as their daughter became weaker and weaker. The next day, however, Katalin could not move her arm. It became suddenly clear: she had contracted polio. Her parents rushed her to the district paediatrician, who directed them to the nearby infectious disease hospital, where she spent a couple of weeks, the acute phase of her illness. Over ten years later she became an outpatient in the paediatric hospital for physical therapy and orthopaedic treatment, under the care of Dr László Lukács, who operated on her arm in August 1956. However, her treatment was soon interrupted: a revolution that broke out on 23 October prevented her usual visits. Living at the very centre of the armed conflict, Katalin spent weeks in the underground shelter of her house, along with her family and neighbours, while soldiers and civilians fought a desperate battle with tanks, machine guns and Molotov cocktails. During this period, she tried to maintain a certain routine and continued to perform exercises prescribed by her orthopaedist. The conditions were definitely not optimal for managing a disease that debilitated her muscles and required constant work to avoid atrophy. She did manage to progress in her 'treatment', though, when a nearby bomb explosion blasted the cellar door and slammed her into the wall in a very fortunate position, making up for lost physical therapy in the process.¹

¹ Katalin Parádi, interview by Dora Vargha, 27 January 2010.

Katalin's treatment was not just an individual affair; it embodied the personal and political realities of the Cold War.

Her trip to the physiotherapist in the wake of the revolution was the last time she visited the paediatric hospital ward. A couple of weeks after gunfire stopped interrupting her days, in mid-November 1956, she became one of the first patients of the new Heine-Medin Post Treatment Hospital in the elegant and elitist district of Rózsadomb. Created during the most turbulent days of 1956, the hospital was founded on the direct orders of Imre Nagy, prime minister of the revolution.² Nagy would never see the result of his orders, as he was soon imprisoned then executed as the leader of the 'counter-revolution' by the communist government. Despite Nagy's ill fate, the hospital was not closed down. It survived and even flourished in the early 1960s as a major Hungarian centre for polio treatment.

Katalin's history with the disease was not over. As part of a national immunisation plan and as a high school student, she received the Salk vaccine in 1957. This vaccine had been imported, after much deliberation by the communist government in 1957, from the West. Shortly after the injection she contracted another strain of the poliovirus that paralysed her yet untouched legs. It is unclear if the disease was directly introduced by the vaccine (this had happened before in the United States, in the infamous Cutter incident³) or if the vaccine failed to provide the desired immunisation.⁴ She was not the only one who came down with polio well after the introduction of the Salk vaccination programme. In fact, just two years later in 1959, the new hospital's wards were filled with new polio patients in the second largest epidemic in the country's history.

Only in 1960 did polio epidemics finally stop. A new vaccine from the East was introduced in Hungary: the Sabin drops. As case incidence dwindled in the

² László Lukács, 'Feljegyzés a Fővárosi Heine-Medin Kórház és Rendelőintézet Alapításáról, Működéséről, Eredményeiről és Ezzel Kapcsolatos Tevékenységéről.' Budapest: Personal archives of Dr. Prof. Ferenc Péter, 1993.

³ In April 1955 almost 200 patients in the United States (mostly children and family members) contracted paralytic polio from a faulty batch of Salk vaccine produced by Cutter Laboratories. Neal Nathanson and Alexander D. Langmuir, 'The Cutter Incident Poliomyelitis Following Formaldehyde-Inactivated Poliovirus Vaccination in the United States during the Spring of 1955', *American Journal of Epidemiology* 78, no. 1 (1964): 16–28. See also Paul A. Offit, *The Cutter Incident: How America's First Polio Vaccine Led to the Growing Vaccine Crisis* (New Haven: Yale University Press, 2005).

⁴ While in polio epidemics preceding 1957 the dominant strains were Type II and III, in 1957 Type I caused the most paralysis in children who contracted the virus. Therefore, the immunity acquired with illness caused by one type would not protect the body against another. This is why it is possible, although very rare for one person to become ill with polio several times. István Dömök, 'A Hazai Járványügyi Helyzet az Élő Poliovírus Vakcina Bevezetése Előtt', in *A Gyermekbénulás Elleni Küzdelem. Beszámoló a Ma Már Múltá Vált Betegség Ellen Folytatott Hősies Küzdelemről és Felszámolásának Lehetőségéről*, ed. Rezső Hargitai and Ákosné Kiss (Budapest: Literatura Medicina, 1994), 41–45, at 42.

new hospital, now Katalin's workplace, polio ceased to be an important issue in the eyes of the state. What the failure of a revolution did not manage, the success of a vaccine did – the hospital's polio treatment centre was closed down in 1963 and was transformed into a general children's hospital.

Katalin was one of thousands of children who contracted polio or received specialised care in the 1950s in Hungary. Her story is but one of many that this book tells: lives with and around polio in Hungary entangled with global Cold War politics through their encounter with vaccination, treatment and the long-term effects of a debilitating disease. This book uses the series of polio epidemics in communist Hungary to understand the response to a global public health emergency in the midst of an international political crisis. Despite the antagonistic international atmosphere of the 1950s, spaces of transnational cooperation between blocs emerged to tackle a common health crisis. At the same time, epidemic concepts and policies were largely influenced by the very Cold War rhetoric that this medical and political cooperation transcended.

Spread by a virus and potentially causing permanent paralysis, poliomyelitis (or infantile paralysis, as it was also known in the era) in the 1950s became a major public health concern across the globe – and the Iron Curtain. However, international cooperation in polio control and treatment has been little investigated,⁵ as the history of the disease has mostly been explored through national histories, primarily in an American context.⁶ Equally scarce is the literature on

⁵ Saul Benison, 'International Medical Cooperation: Dr. Albert Sabin, Live Poliovirus Vaccine and the Soviets', *Bulletin of the History of Medicine* 56, no. 4 (1982): 460–83; David M. Oshinsky, *Polio: An American Story* (Oxford and New York: Oxford University Press, 2005), 237–54; Rosa Ballester and María Isabel Porras, 'La Lucha Europea Contra La Presencia Epidémica De La Poliomiélitis: Una Reflexión Histórica', *Dynamis* 32, no. 2 (2012): 273–85; Naomi Rogers, *Polio Wars: Sister Kenny and the Golden Age of American Medicine* (Oxford: Oxford University Press, 2014).

⁶ Dilene Raimundo do Nascimento, 'Poliomyelitis Vaccination Campaigns in Brazil Resulting in the Eradication of the Disease (1961–1994)', *Hygiea Internationalis* 11, no. 1 (2015): 130–44; Enrique Beldarraín, 'Poliomyelitis and Its Elimination in Cuba: An Historical Overview', *MEDICC Review* 15, no. 2 (2013): 30–36; Bernardino Fantini, 'Polio in Italy', *Dynamis* 32, no. 2 (2012): 329–61; Per Axelsson, 'The Cutter Incident and the Development of a Swedish Polio Vaccine', *ibid.*: 311–28; Elisha P. Renne, *The Politics of Polio in Northern Nigeria* (Bloomington: Indiana University Press, 2010); Pietro Crovari, 'History of Polio Vaccination in Italy', *Italian Journal of Public Health* 7, no. 3 (2010): 322–24; Juan Antonio Rodríguez Sánchez and Jesús Seco Calvo, 'Las Campañas De Vacunación Contra La Poliomiélitis en España en 1963', *Asclepio. Revista de Historia de la Medicina y la Ciencia* 61, no. 1 (2009): 81–116; Ulrike Lindner and Stuart Blume, 'Vaccine Innovation and Adoption: Polio Vaccines in the UK, the Netherlands and West Germany, 1955–1965', *Medical History* 50, no. 4 (2006): 425–46; Luis Barreto, Rob Van Exan, and Christopher J. Ruddy, 'Polio Vaccine Development in Canada: Contributions to Global Polio Eradication', *Biologicals*, no. 34 (2006): 91–101; D. Slonim et al., 'History of Poliomyelitis in the Czech Republic – Part III', *Central European Journal of Public Health* 3, no. 3 (1995): 124–6; Jean C. Ross, 'A History of Poliomyelitis in New Zealand' (MA thesis, University of Canterbury, 1993).

the history of medicine and health in Eastern Europe during the Cold War, especially regarding Hungary.⁷

From a Hungarian perspective, the book explores the Cold War history of polio on three registers of analysis that move from global politics, governmental and institutional concerns, to the patient–doctor level. On an international level, it asks how Cold War divisions can be re-evaluated when viewed through the lens of a disease that disregarded borders and ideologies. On a national level, the book investigates how post-war societies and nascent political systems dealt with an epidemic that worked against their modernist projects. On an individual level, it raises questions about definitions of treatment and authority of care, and investigates the boundary between professional and lay knowledge.

The unique geopolitical situation of Hungary on the boundary of the Iron Curtain and the construction of a new communist regime makes the country an ideal ground to understand the influence of the Cold War in forming global health responses to epidemic crises.⁸ With a vaccine first arriving from the West, followed by a new serum from the East, the Hungarian story highlights issues of international politics, experimentation and standardisation in epidemic prevention. Furthermore, focus on Hungary allows linking of the intimate world of families with national and international agendas through care for disabled children with polio.

Major polio epidemics struck the country in 1952, 1954, 1956, 1957 and 1959, becoming more and more severe as the decade progressed. By the

⁷ See for instance Lily M. Hoffman, 'Professional Autonomy Reconsidered: The Case of Czech Medicine under State Socialism', *Comparative Studies in Society and History* 39, no. 2 (1997): 346–72; Bradley Mathys Moore, 'For the People's Health: Ideology, Medical Authority and Hygienic Science in Communist Czechoslovakia', *Social History of Medicine* 27, no. 1 (2014): 122–43; Sarah Marks and Mat Savelli, *Psychiatry in Communist Europe*, Mental Health in Historical Perspective (Houndmills, Basingstoke, Hampshire; New York, NY: Palgrave Macmillan, 2015); Ana Antic, 'Heroes and Hysterics: "Partisan Hysteria" and Communist State-Building in Yugoslavia after 1945', *Social History of Medicine* 27, no. 3 (2014): 349–71; Carsten Timmermann, 'Americans and Pavlovians: The Central Institute for Cardiovascular Research at the East German Academy of Sciences and Its Precursor Institutions as a Case Study of Biomedical Research in a Country of the Soviet Bloc (c. 1950–1980)', in *Medicine, the Market and Mass Media*, ed. Virginia Berridge and Kelly Loughlin (London: Routledge, 2005); Donna Harsch, 'Medicalized Social Hygiene? Tuberculosis Policy in the German Democratic Republic', *Bulletin of the History of Medicine* 86, no. 3 (2012): 394–423. Several non-historical studies can give an insight into Eastern European medicine in the 1950s and 1960s: see Richard E. Weinerman and Shirley B. Weinerman, *Social Medicine in Eastern Europe: The Organization of Health Services and the Education of Medical Personnel in Czechoslovakia, Hungary, and Poland* (Cambridge, Mass.: Harvard University Press, 1969); Zdenek Stich, *Czechoslovak Health Services* (Prague: Ministry of Health, Czechoslovak Socialist Republic, 1962).

⁸ Conversely, many historians have argued for the importance of borderlands and border crossings in the study of state socialist and communist regimes, see for instance the special section Libora Oates-Indruchová and Muriel Blaive, 'Border Visions and Border Regimes in Cold War Eastern Europe', *Journal of Contemporary History* 50, no. 3 (2015): 656–59.

mid-1960s one in 500 out of the population of 10 million had become permanently disabled because of the disease, a rare documentary film from 1967 claimed.⁹ As Katalin's story shows, children with polio had to deal not only with the consequences of their disease but also with the challenges of a difficult decade: an over-zealous but in many ways inefficient Stalinist regime, a violent revolution, bloody retributions and gradual consolidation of the Kádár government. Their treatment was affected by and continued through tumultuous times and was shaped by the meagre resources of a post-war society in a world divided by Cold War barriers.

Polio, in its worst decade, afflicted a relatively small number of people in Hungary, just as elsewhere in the world, compared to other contemporary health issues. For example, in the year of the second largest epidemic in Hungary, nearly four times as many people fell ill with influenza and its complications, resulting in a death toll 140 times larger than that of polio.¹⁰ Polio is a disease that is rather difficult to diagnose in its early phases. Many children got through the disease without even knowing it, as if fighting a common flu. Due to this diagnostic difficulty, paired with inaccurate registry and belated reporting,¹¹ it is hard to tell how many children needed to be hospitalised, and if all registered cases were paralytic. However, one thing is quite clear: polio became a priority in the eyes of the communist state, regardless of changing governments.

The disease symbolised a destructive threat to communist and modernist projects. Thus, it became a major global concern in the 1950s, and one of the most important public health issues by the end of the decade. It affected children in post-war societies, leaving crippled bodies behind at a time of heightened industrial production and recuperation from the war. Epidemics hit Hungary at a time when, together with most of Europe and a good part of the world, the country was recovering from the shock of the Second World War. In the course of the war, Hungary, which fought on the side of Nazi Germany, lost 40 per cent of its national wealth and over 10 per cent of its population, around 1 million people. This was devastating, given that the country was already among the poorer half of European nations in the interwar era.¹²

⁹ *'Minden Ötszázadik'*, Hungary, 1967. This film is unique in actually portraying disability. Children who lived with permanent paralysis due to the disease were otherwise invisible and were physically and socially secluded.

¹⁰ Központi Statisztikai Hivatal, 'Egészségügyi Helyzet 1963', *Statisztikai időszaki közlemények*, no. 5 (1964): 86.

¹¹ Dr. Tibor Bakács. 'Poliomyelitis Betegek Védőoltására Vonatkozó Adatgyűjtés'. Budapest: National Archives of Hungary, Országos Közegészségi Intézet Járványügyi és Mikrobiológiai Főosztályának iratai, XXVI-C-3-e/1959, 5587, 1959.

¹² This number includes military and civil casualties, and the Jewish population that was deported to concentration camps and civilians and soldiers deported to Siberian work camps. Ignác Romsics, *Hungary in the Twentieth Century* (Budapest: Osiris, 1999). The loss of military

A battle that lasted almost a year left Budapest, the capital, in ruins and claimed the lives of thousands. It took decades to rebuild houses, bridges and transportation systems and for the new communist regime that took exclusive power in 1949 to build and consolidate a whole new administrative, social and economic system. It is into this context that polio made an entrance, continuing to place challenges in front of international organisations, governments and society until the early 1960s.

To understand the significance of polio in the Cold War, we must stop for a moment to consider the social, economic and political history of the era in question. In a wider context of the history of science, the looming threat of nuclear war overshadowed the era. Military and strategic considerations contributed to the formation of Big Science and affected research funding structures and research practices all over the world.¹³ While the potential threat of destruction was pervasive, other effects of the Second World War were equally important to how the politics of polio played out in the 1950s – on the economy, on concepts of citizens' roles, on beliefs in progress in medicine and science, on concerns over ethical issues in medicine. Moreover, this was also a time of formation of international agencies like the World Health Organisation; decolonisation; the establishment of new regimes; and the emergence of ideas of modern societies.

One of the key sites for new regimes that worked with particular ideas of modernity was Eastern Europe, where, in accordance with the Soviet Union, communist governments emerged to gain exclusive political control between 1945 and 1952. Soon after the war, countries of the emerging Eastern Bloc embarked on a project of socialist modernity in dialogue with the West's liberal modernity. In many ways exhibiting hallmarks of Western variants, the state socialist 'alternative modernity' encompassed the goal of a complete reshaping of state, society and economy; rapid industrialisation; a developing welfare state, an extensive surveillance and scientific state administration; together with a non-public public sphere and a depoliticised polity.¹⁴ It is no

troops was about 300,000; civilians killed in air raids and military campaigns 80,000–100,000; Jews destroyed in death camps, labour battalions and atrocities during the reign of the Arrow Cross Party 480,000 (200,000–210,000 for Trianon Hungary); and about 200,000–250,000 of people captured in battle or collected for forced labor perished in Gulags. Gábor; Kövér Gyáni, György; Valuch, Tibor, ed. *Social History of Hungary from the Reform Era to the End of the Twentieth Century*, Atlantic Studies on Society in Change (New York: Columbia University Press, 2004), 522–23.

¹³ See for instance Naomi Oreskes and John Krige, eds., *Science and Technology in the Global Cold War (Transformations: Studies in the History of Science and Technology)* (Cambridge, Mass.: MIT Press, 2014); Paul Erickson, 'The Politics of Game Theory: Mathematics and Cold War Culture' (University of Wisconsin, 2006).

¹⁴ Katherine Pence and Paul Betts, 'Introduction', in *Socialist Modern: East German Culture and Politics* ed. Katherine Pence and Paul Betts (Ann Arbor: University of Michigan Press, 2008), 1–37.

wonder, then, that public health campaigns, disease surveillance, medical research and epidemic management were very much part of the Hungarian socialist modern project, where disorganised and unruly reporting practices and vaccination campaigns coexisted with the oppressive practices of the post-1956 regime and the surveillance of citizens. The interaction of children, parents, virologists and physicians with the socialist modern state in the epidemic years reveals the way this modern project was co-constructed in a tumultuous time of political upheaval.

Hungary in the 1950s faced a decade that saw the establishment of a Stalinist dictatorship, reform, revolution and early consolidation. Four successive governments followed each other in a dynamically changing political, economic and social scene. After an initial attempt to restore parliamentary democracy between 1945 and 1947, the Hungarian Communist Party gained more and more power and started laying down the foundations of state socialism. The communist takeover was a mix of failed negotiations, planned strategy and election fraud, rather than part of a uniform process in Eastern Europe controlled wholly by the Soviet Union, as recent scholarship has pointed out.¹⁵ Regardless of historiographical interpretations, the merge of the Communist Party and the Social Democrat Party to form the Hungarian Workers' Party, HWP (Magyar Dolgozók Pártja, MDP), in 1948 marked the beginning of a one-party system that lasted until 1989.

The peculiarity of the Hungarian political system was its dual structure. Every level of the state administration was paired with a counterpart in the party administration. The dual structure resulted in the creation of a cobweb of hierarchies and dependencies.¹⁶ As Ivan T. Berend put it, 'the monolithic party, in a paradoxical way, was itself an institution of a fragmentary pluralism'.¹⁷ This does not mean that the political system was not oppressive – it was a dictatorship and as the communist government's grip on power became more and more firm, the repression of the opposition intensified. Based on the foundations of anti-fascist retribution, the regime split society into 'supporters' and 'enemies'. The State Security Agency (ÁVO, later ÁVH) expanded with escalating speed from 1948 and former political allies were put on show trials to underline the image of the enemy within.¹⁸ The Catholic Church, whose

¹⁵ See e.g. Peter Kenez, 'The Hungarian Communist Party and the Catholic Church 1945–1948', *The Journal of Modern History* 75, no. 4 (2003).

¹⁶ Mária Csanádi, 'Honnan Tovább? A Pártállam És Az Átalakulás', in *Magyarország Társadalomtörténete (1945–1989)*, ed. Nikosz Fokasz and Antal Örkeny (Budapest: Új Mandátum, 1998), 147–73.

¹⁷ Ivan T. Berend, *Central and Eastern Europe, 1944–1993: Detour from the Periphery to the Periphery*, Cambridge Studies in Modern Economic History (Cambridge: Cambridge University Press, 1996), 54.

¹⁸ Mark Pittaway, *Eastern Europe 1939–2000*, ed. Jeremy Black, Brief Histories (London: Hodder Arnold, 2004), 51–55.

head, Cardinal József Mindszenty, was an emblem of conservative criticism, also found itself in a difficult situation. In fact, the figure of Mindszenty remained a sensitive point in Cold War domestic and foreign politics for many years to come.¹⁹

In terms of economics, Hungary operated a centralised, planned economy. Economic planning of this sort was not particular to Eastern Europe, nor was it unique to communist regimes.²⁰ The first three-year plan was launched in 1947 and targeted economic reconstruction from the effects of the war. The first five-year plan followed in 1950, with the goals of industrialisation and agricultural collectivisation, based on Stalinist policies. The darkest days of Hungarian communism followed, now termed the Rákosi dictatorship after Mátyás Rákosi, the General Secretary of the HWP. In the process of collectivisation, all produce found in random searches of peasants' homes was confiscated, including seeds intended for planting next year's crop (colloquially called 'sweeping the attics'); about 130,000 people were banned from Budapest and forced to resettle in villages; and rationing was introduced to combat the shortage of food supplies.²¹

Stalin's death in 1953 resulted in political change across the Eastern Bloc and Hungary was no exception: Rákosi was removed and Imre Nagy became prime minister. Reforms followed, mainly regarding the economic structure; victims of show trials were rehabilitated; the hated head of ÁVH, Gábor Péter, was imprisoned; and a thaw in cultural life permitted many writers and poets to publish again. However, taking advantage of a frost in international relations (West Germany joining NATO and the foundation of the Warsaw Pact) and change in Soviet politics, Rákosi succeeded in removing Nagy in the spring of 1955 and regained control of Hungarian politics once more. The efforts of the Nagy government and the renewed thaw signalled by Khrushchev's famous speech did not strengthen Rákosi's position. In the summer of 1956 he emigrated to the Soviet Union, never to return. On 23 October 1956 a mass demonstration of university students turned into a desperate and bloody revolution, and soon a new government was set up with Nagy as prime minister and prominent politicians and intellectuals such as György Lukács. The revolution lasted a little over two weeks. Soviet tanks rolled into the streets of Budapest on 4 November and in a few days broke all resistance. While the uprising was short-lived, it became a key moment in the Cold War. The Hungarian revolutionary became 'The Man of the Year' on the cover of

¹⁹ Kenez, 'The Hungarian Communist Party and the Catholic Church 1945–1948'.

²⁰ Martha Lampland, 'The Technopolitical Lineage of State Planning in Mid-Century Hungary (1930–1956)', in *Entangled Geographies: Empire and Technopolitics in the Global Cold War*, ed. Gabrielle Hecht (Cambridge, Mass: MIT Press, 2011), 155–84.

²¹ Ivan T. Berend, 'The First Phase of Economic Reform in Hungary: 1956–1957', *Journal of European Economic History* 12, no. 3 (1983): 523–71.

TIME magazine and the events of October became significant in shaping the international relations and domestic politics of the new János Kádár regime for decades to come.

Overall, the successive communist regimes in the 1950s set out to establish a new society that positioned itself against the pre-war bourgeois world. The proclaimed aim of socialism was to create a classless society and to do away with social inequality. One of the methods in achieving this goal was to widen access to education. The number of children entering and finishing eight years of primary schooling grew significantly compared to the pre-war era, as did the number of students entering secondary schools.²² However, inequalities based on social connections, prestige, urban and rural spaces, and gender prevailed.

For the most part, the inequalities of the pre-war era were replaced by new inequalities, based on political position and influence, or hierarchy in work.²³ Moreover, there was no clean break with the pre-war society – about 60–70 per cent of professionals in 1956 occupied a similar position as before the war.²⁴ As this book demonstrates, one of these groups comprised physicians, who, despite becoming a predominantly conservative or outright right-wing profession in the interwar era (after doctors of Jewish origin were removed), retained their status and were able to secure some political independence simply based on the grave need for doctors. Additionally, bourgeois families that were marginalised in the early 1950s gradually adapted and regained their social status.²⁵

Inequalities in society mapped onto the urban structure of the country as well. The emphasis on industrialisation affected where and how people lived, as well as the services and resources to which they had access. Budapest remained the disproportionately large urban and administrative centre of the country,²⁶ but other industrial centres also emerged, like the new city of Sztálinváros, founded in 1951, which was meant to be a model socialist settlement with model working-class citizens.²⁷ Hamlets were to be abolished,

²² Gyáni et al., *Social History of Hungary from the Reform Era to the End of the Twentieth Century*, 572–73.

²³ Szonja Szelényi, *Equality by Design: The Grand Experiment in Destratification in Socialist Hungary* (Stanford: Stanford University Press, 1998).

²⁴ Pittaway, *Eastern Europe 1939–2000*, 57.

²⁵ Gyáni et al., *Social History of Hungary from the Reform Era to the End of the Twentieth Century*, 579. For a detailed discussion of the bourgeoisie in post-war Hungary, see James Mark, 'Discrimination, Opportunity and Middle-Class Success in Early Communist Hungary', *The Historical Journal* 48, no. 2 (2005): 499–521.

²⁶ This was partially the result of the Treaty of Trianon of 1920, when the boundaries of Hungary were redrawn, reducing the country's size by two-thirds. Other large cities and administrative centers now fell outside the border, leaving Budapest to account for about a tenth of the population.

²⁷ Sándor Horváth, 'Everyday Life in the First Hungarian Socialist City', *International Labor and Working-Class History* 68 (2005): 24–46.

since their inhabitants could not be closely monitored for the sake of collectivisation. Development in villages that were not cooperative production centres was barred until the 1960s, also in order to encourage the peasantry to participate in collectives. The infrastructure of these settlements did not change much in the first decades of the communist regime, as most roads were not paved and houses were left without electricity and running water.²⁸

Faced with the effects of the war, as well as the economic goals and ideals of the new era, the state enforced a strict pro-natalist policy in the early 1950s in the hope of increasing live births and thereby the number of productive workers. However, a short increase was soon followed by a decrease in live births after the 1956 revolution, paired with a massive emigration of dissidents. Demography mattered to this nascent communist state – as did able bodies.

The epidemic waves of polio came to Hungary at the time of this demographic shock and challenged the process of social, political and economic reorganisation. The relatively new communist government, which positioned itself as the answer to a bright and productive future, had to deal with the traumatic effects of polio epidemics, which threatened communist ideals at their foundations. Therefore, during the 1950s, the state took numerous steps to fight the disease. Besides promoting poliomyelitis research,²⁹ the government educated the public about prevention and treatment of polio through propaganda films³⁰ and issued a weekly report during epidemics detailing the geographical spread of the disease and the number of people affected. To curb the spread of the disease, regulations controlled the public travel of children under 14 years old, requiring a medical examination before departure.³¹

Despite education and restrictions on travel, many children contracted the virus and required urgent care. Iron lungs were an extremely important technology in saving and treating children with polio in hospitals. A forerunner of the modern respirator and a cutting-edge and costly technology, the iron lung mechanically breathed for paralysed children who were unable to breathe for themselves. The first iron lung arrived in Hungary in 1948, with the cooperation of the American embassy. In the first half of the 1950s, iron lungs began to be produced in Czechoslovakia and the GDR, and finally, in the mid-1950s, in Hungary as well.³² A number of devices arrived

²⁸ Gyáni, *Social History of Hungary from the Reform Era to the End of the Twentieth Century*, 537–39.

²⁹ The State Hygienic Institute, which cooperated with the Epidemics Department of the Health Ministry, led the research beginning in 1953, Tibor Dr Bakács, *Az Országos Közegészségügyi Intézet Működése 1927–1957* (Budapest: Országos Közegészségügyi Intézet 1959), 82.

³⁰ 'Bemutatták a Gyermekparalízisről Készült Filmet', *Népszabadság*, 9 August 1957, 9; 'Szülők, Vigyázzatok!', Health Ministry, Hungary, 1957.

³¹ A Magyar Forradalmi Munkás-Paraszt Kormány 1027/1958 (VIII. 3.) számú határozata a gyermekbénulás elleni védekezésről (1958).

³² Domokos Boda, *Sorsfordulók* (Budapest: Harmat, 2004), 60.

during the epidemic years as a result of a lending system orchestrated by the Red Cross. By 1959, over 100 Hungarian iron lungs were in use in the country, a considerable amount if one takes into account the high cost and constant care that these machines required.

The effort against polio in Hungary crossed borders in other ways as well, all of which appear to have been surprisingly cooperative. Hungarian scientists were regular participants in Western conferences on polio. Experts in Hungary could keep an eye on global trends in virology and treatment, occasionally publishing in Western journals as well. The professional situation of sciences, especially medicine, remained relatively autonomous in comparison to humanities, which were placed under strict state control.³³

Iron lungs were not the only medical technology crossing the Iron Curtain – vaccines also made their way through the seemingly impenetrable wall in numerous ways. Nationwide vaccination began in Hungary in 1957, first with the killed virus vaccine developed by Jonas Salk and followed by Albert Sabin's live virus vaccine in 1959. Vaccines containing dead and live viruses appeared to be solutions to contagion, but also had the potential power to cause disease instead of fighting it and thus to inflict serious damage on the most innocent and pure members of society, the promise of the future: children. Therefore, questions about the source of the vaccine, where and from what it was made, who produced it and who distributed it became important political problems. However, the fact that there was, indeed, cooperation between the two sides of the Iron Curtain implies that at the same time, vaccination was perceived as a goal above politics and Cold War tensions.

Effective vaccination in Hungary was attained only with the introduction of the live virus Sabin vaccine on 14 December 1959, this time making its way from the Soviet Union. After 1963 the number of cases was reduced to 0–4 in the whole population, and since 1972 there have been no recorded wild polio cases.³⁴ Once free vaccination with the Sabin vaccine put an end to epidemics, it also put an end to the existence of specialised polio hospitals, although vaccination made little difference to those already disabled by the disease. With the threat of the epidemics gone, the productive bodies of Hungary's future generation were no longer considered physically in danger of becoming disabled, and therefore the state was no longer politically invested in polio. As

³³ For example in Poland, East Germany and the Czech Republic, see John Connelly, *Captive University: The Sovietization of East German, Czech and Polish Higher Education, 1945–1956* (Chapel Hill: University of North Carolina Press, 2000).

³⁴ István Dömök, A kampányoltások időszaka (1959–1991), in Rezső Hargitai and Ákosné Kiss, eds., *A Gyermekbénulás Elleni Küzdelem: Beszámoló egy Ma Már Múlttá Váló Rettegett Betegség Ellen Folytatott Hősies Küzdelemről és Felszámolásának Lehetőségéről: a Szent László Kórház Centenáriumára Készült Összeállítás* (Budapest: Literatura Medica, 1994), 169–78, at 169.

the disease vanished entirely from public discourse and centres for polio treatment and care were dispersed, disabled polio patients disappeared from the medical gaze as well.

While the 'official' history of polio in Hungary ends with the eradication of the disease, the story of the people, knowledge and institutions affected by it does not. Certain professional and patient groups, which had become the centre of social and political focus during the time of the epidemics, disappeared along with lay and medical knowledge of prevention and treatment as the 'heroic struggle' came to an end. At the same time, other groups such as disabled civil societies arose, beginning new stories of their own.

To explore this complex Cold War history of polio, this study relies on extensive, original research, in the archives of international organisations such as the World Health Organisation and the International Committee of the Red Cross; The National Archives of the Hungarian government and the Hungarian Red Cross Society; the City Archives of Budapest; institutional archives of the Hungarian Film Institute, Yale University, the Sabin archives at the University of Cincinnati, the College of Physicians and the American Philosophical Society in Philadelphia. The book also draws heavily on published sources such as newspapers, magazines, medical journals, hospital newsletters, memoirs, conference proceedings, interviews and documentaries. Written sources were complemented with oral history interviews with health professionals and former polio patients, conducted by the author between 2007 and 2012.

Through the movement of people, technologies and ideas that frame the Hungarian narrative of polio, this work particularly focuses on international cooperation and exchange in the Cold War. Traditionally, Cold War scholarship has focused on high politics and security studies. Cold War relations between East and West have been analysed through military, political and socio-economic rivalries, as conflicts between socialism and capitalism. These considerations are no doubt crucial parts of the story, as the book demonstrates. However, mostly through the study of material culture and modernity, histories that approach the Cold War divide and the Iron Curtain itself in more dynamic ways have begun to move this scholarship towards the investigation of interaction and collaboration. György Péteri's 'nylon curtain' concept,³⁵ or Michael David-Fox's idea of the Iron Curtain as a semipermeable membrane,³⁶ are indicative of this turn in Cold War scholarship.

³⁵ György Péteri, *Nylon Curtain: Transnational and Transsystemic Tendencies in the Cultural Life of State-Socialist Russia and East-Central Europe*, Trondheim Studies on East European Cultures & Societies (Trondheim: Program on East European Cultures and Societies, 2006).

³⁶ Michael David-Fox, 'The Iron Curtain as a Semipermeable Membrane: Origins and Demise of the Stalinist Superiority Complex', in *Cold War Crossings: International Travel and Exchange across the Soviet Bloc, 1940s–1960s*, ed. Patryk Babiracki and Kenyon Zimmer (College Station: Texas A&M University Press, 2014), 14–40.

Indeed, new dimensions of interaction between the two sides can be traced when looking at the Cold War from different perspectives³⁷ – in this case from the experience of polio in Hungary. One of the approaches that argue for a broadening of geographical focus and scope of historical investigation comes from recent studies in the fields of history of science, and science and technology studies.³⁸ This book shifts attention from the two superpowers to an Eastern European state and focuses on the circulation of medical knowledge and technology rather than on the competition between the Soviet Union and the United States. Instead of Cold War intransigence, the case of polio in Hungary shows surprising flexibility in foreign and domestic policies and demonstrates the circumstances under which the Iron Curtain was drawn to let people, vaccines and practices through.

On the national level of investigation, the book takes a closer look at the relationship between the communist state and Hungarian society. Polio struck in the formative years of the communist government, when the new regime was striving to establish a new political, economic and social order. I investigate the limits and possibilities of the paternal state³⁹ and the fluctuation of parental duties to the health of children between state and parents.

³⁷ See for instance approaches in Sari Autio-Sarasma and Brendan Humphreys, eds., *Winter Kept Us Warm: Cold War Interactions Reconsidered*, Aleksanteri Cold War Series (Helsinki: University of Helsinki, 2010); Zuoyue Wang, 'Transnational Science during the Cold War: The Case of Chinese/American Scientists', *Isis* 101, no. 2 (2010): 367–77; Nikolai Kremensov, *The Cure. A Story of Cancer and Politics from the Annals of the Cold War* (Chicago and London: University of Chicago Press, 2002).

³⁸ See David A. Hounshell, 'Rethinking the Cold War; Rethinking Science and Technology in the Cold War; Rethinking the Social Study of Science and Technology', *Social Studies of Science* 31, no. 2 (2001): 289–97; Marcos Cueto, *Cold War, Deadly Fevers: Malaria Eradication in Mexico, 1955–1975* (Washington, D.C.; Baltimore: Woodrow Wilson Center Press; Johns Hopkins University Press, 2007); Gabrielle Hecht, ed. *Entangled Geographies: Empire and Technopolitics in the Global Cold War*, Inside Technology (Cambridge, Mass.: MIT Press, 2011). Hunter Heyck and David Keiser, 'Focus: New Perspectives on Science and the Cold War. Introduction', *Isis* 101, no. 2 (2010): 362–66; Rachel Rotschild, 'Détente from the Air: Monitoring Air Pollution during the Cold War', *Technology and Culture* 57, no. 4 (2016): 831–65; Simo Mikkonen and Pia Koivunen, eds., *Beyond the Divide: Entangled Histories of Cold War Europe* (New York and Oxford: Berghahn Books, 2015); Kate Brown, *Plutopia: Nuclear Families, Atomic Cities, and the Great Soviet and American Plutonium Disasters* (Oxford: Oxford University Press, 2013).

³⁹ On the paternal state in Eastern Europe see Gail Kligman, *The Politics of Duplicity: Controlling Reproduction in Ceausescu's Romania* (Berkeley: University of California Press, 1998); Lynne Haney, *Inventing the Needy: Gender and the Politics of Welfare in Hungary* (Berkeley, Los Angeles and London: University of California Press, 2002); Catriona Kelly, *Children's World: Growing up in Russia 1890–1991* (New Haven: Yale University Press, 2007); Katherine Verdery, 'From Parent-State to Family Patriarchs: Gender and Nation in Contemporary Eastern Europe', *East European Politics and Societies* 8, no. 2 (1994): 225–55.

Following new historical approaches that concentrate on features of communist regimes that are neglected by traditional analysis⁴⁰ and aim to deconstruct Cold War narratives, the involvement of society and questions of agency are central to this book. I do not consider the state to be a monolithic entity,⁴¹ nor communist Hungary to be totalitarian in the way that it is often portrayed in Hungarian historiography⁴² and public history collections.⁴³ Eventual failure to control the reproductive rights of women in the early 1950s, as detailed in Chapter 1, or the inefficiency of disease reporting and vaccination organisation, shown in Chapter 3, point to a possible understanding of Hungarian communism as an unsuccessful effort at totalitarianism.

While I show inefficient bureaucratic structures, internal conflicts and wavering positions through the history of polio, in the majority of the study I refer to the respective governments in this era as the 'state'. In the story that unfolds through the prevention and treatment of the disease, most of the actors

⁴⁰ E.g. Katherine A. Lebow, 'Public Works, Private Lives: Youth Brigades in Nowa Huta in the 1950s', *Contemporary European History* 10, no. 2 (2001): 199–219; Gail Kligman and Katherine Verdery, 'Social Dimensions of Collectivization: Fomenting Class Warfare in Transylvania', in *World Order after Leninism: Essays in Honor of Ken Jowitt*, ed. Vladimir Tismaneanu, Marc Morjé Howard, and Rudra Sil (Seattle: Herbert J. Ellison Center for Russian, East European, and Central Asian Studies, University of Washington, 2006). 'Malgorzata Fidelis, 'Equality through Protection: The Politics of Women's Employment in Postwar Poland, 1945–1956', *Slavic Review* 63, no. 2 (2004): 301–24; Eagle Glassheim, 'Ethnic Cleansing, Communism, and Environmental Devastation in Czechoslovakia's Borderlands, 1945–1989', *Journal of Modern History* 78, no. 1 (2006): 65–92.

⁴¹ On the fluidity and multiplicity of the Hungarian communist state, see Haney, *Inventing the Needy*.

⁴² On the historiography of totalitarianism, see Michael Geyer and Sheila Fitzpatrick, 'After Totalitarianism – Stalinism and Nazism Compared', in *Beyond Totalitarianism: Stalinism and Nazism Compared*, ed. Michael Geyer and Sheila Fitzpatrick (New York: Cambridge University Press, 2008), 1–41. The totalitarian approach to the communist state, as represented by Arendt and Brzezinski has seen a revival after 1989. As Claudia Koonz notes in her chapter *Between Memory and Oblivion* (1994), there was a shift in the appliance of the totalitarian concept after the Berlin Wall fell. Previously, Western rhetoric presented Nazism and Communism as equal, while after the *Wende*, Eastern countries took on this view in order to get their suffering acknowledged. This shift is most apparent in commemorations. Claudia Koonz, 'Between Memory and Oblivion: Concentration Camps in German Memory', in *Commemorations: The Politics of National Identity*, ed. John R. Gillis (Princeton: Princeton University Press, 1994), 258–80. Hannah Arendt, *The Origins of Totalitarianism* (Orlando: Harcourt, 1973); Carl Friedrich and Zbigniew Brzezinski, *Totalitarian Dictatorship and Autocracy* (Cambridge, Mass.: Harvard University Press, 1965).

⁴³ The rigid, totalitarian and monolithic representation of the communist era in Hungary has been widely utilised in political discourse since the 1990s. One of the most striking examples of this view is the House of Terror museum in Budapest, which presents an undifferentiated image of the forty years and merges the Stalinist government of the early 1950s with Kádár's Hungary in the 1980s. See Zsolt K. Horváth and Zsófia Frazon, 'A Megsértett Magyarország. A Terror Háza Mint Tárgybemutató, Emlékmű és Politikai Rítus', *Regio*, no. 4 (2002): 303–47; Péter Apor, 'Eurocommunism: Commemorating Communism in Contemporary Eastern Europe', in *European Memory? Contested Histories and Politics of Remembrance*, ed. Malgorzata Pakier and Bo Strath (New York and Oxford: Berghahn Books, 2010), 233–47.

referred to, and often perceived, the complex system of governance as one unit. As the structure of the state and party were entwined in a complicated web of responsibilities and functions,⁴⁴ the two words were often used interchangeably in the vernacular. Moreover, the government also invested significantly in appearing homogeneous, organised and efficient in its communication. Therefore, in a study of perceived and performed roles and responsibilities of state and society it remains a useful unit of analysis.

The research specifically focuses on epidemics in Hungary between the years 1952 and 1963. During these years, the country saw a rapid growth in the rate of incidence of polio, the arrival of a vaccine from the West, followed by one from the East, and the challenge of long-term care for disabled children. Meanwhile, this troubled decade of Hungarian history witnessed drastic changes in the number and composition of its population, the transformation of its industrial and agricultural production, and the greatest political upheaval of the century. The year 1952 marked the first major epidemic of the century, which initiated a significant political and medical response, while 1963 brought the end of involvement on the part of the state with the successful elimination of the disease and the closing down of the specialised treatment centre.

The periodisation of this study might be somewhat surprising for those whose eyes are trained to see Eastern European history of the early communist era divided into clear and distinct eras: in Hungary's case the communist takeover between 1945 and 1948; the Stalinist era from 1948 to 1956; the 1956 revolution and its aftermath until 1963; and the consolidation of the Kádár-era (with the introduction of the New Economic Mechanism, a major economic reform in 1968) that lasted until the late 1980s.⁴⁵

Polio challenges this periodisation of history.⁴⁶ The disease was very much present in the Stalinist era, in the days of the revolution and in the early years of the Kádár regime and, in accordingly, so was political and social concern about it. Polio's history thus in many ways disregards the watersheds that are traditionally held as dividing the early history of communist regimes in Eastern Europe, and more visibly it overrides decisive moments in Hungarian history. I do not wish to claim that such periodisations are superfluous. One cannot minimise the effect of the 1956 revolution on the lives of those who were also touched by epidemic diseases, and, of course, a clear difference can be traced

⁴⁴ Csanádi, 'Honnan Tovább? A Pártállam és az Átalakulás'.

⁴⁵ See for instance the periodization of Romsics, *Hungary in the Twentieth Century*; Pittaway, *Eastern Europe 1939–2000*.

⁴⁶ Similarly, Zsuzsa Gille has contested conventional periodisation of the socialist era in Hungary through a conceptual lens different from economy or political institutions, namely waste regimes. Zsuzsa Gille, *From the Cult of Waste to the Trash Heap of History: The Politics of Waste in Socialist and Postsocialist Hungary* (Bloomington and Indianapolis: Indiana University Press, 2007).

between political and social life in the Stalinist era and the later years. The way polio does affect our view of the history of the 1950s and early 1960s is that it directs attention to continuities and consistencies where traditionally we expect ruptures. The virus spread among children regardless of the current political stance on collectivisation or counter-revolutionary actions, and continuously initiated responses from society and government. Moreover, the particularities of the disease often gave opportunities to individuals and governing bodies to look for cooperation where the usual course of action was animosity, or to go against their own proclaimed policies and ideologies if the need for disease prevention and treatment dictated.

Looking at the personal experiences of polio in Hungary, the book turns to the interaction of medical staff, parents and children in the prevention and treatment of the disease. On the one hand, I explore the particular social and political context of Hungary in the 1950s, in which patients, parents and physicians operated. My analysis is influenced by studies on the relationship of the party-state and factory workers.⁴⁷ As historian Mark Pittaway has pointed out, ‘working-class Eastern Europeans were not simply acted upon by the operation of dictatorial state power, but played a role in state formation’; he describes the complicated relationship of communist states and societies as ‘characterized by consent, accommodation and conflict that varied from locality to locality, state to state, period to period’.⁴⁸ My aim is to probe this relationship through other segments of society, ones that were not the proclaimed centre of the regime’s rhetoric and policies. This level of analysis also makes it possible to explore continuities and ruptures in medical professions,⁴⁹ processes that greatly influenced access to knowledge and treatment options for many children.

On the other hand, through the personal experiences of polio treatment in Hungary I investigate post-war concepts of production and the able body. The ideal of the worker-citizen glaring at the everyday onlooker from murals, statues, magazines and posters had a significant effect on setting goals for

⁴⁷ László Kürti, ‘“Red Csepel”: Working Youth in a Socialist Firm’, *East European Quarterly* 23, no. 4 (1990); Mária Schadt, ‘*Feltörekvő, Dolgozó Nő*’. *Nők az Ötvenes Években* (Budapest: Pannónia, 2005); Mark Pittaway, ‘The Reproduction of Hierarchy: Skill, Working-Class Culture and the State in Early Socialist Hungary’, *Journal of Modern History* 74, no. 4 (2002): 737–69; Eszter Zsófia Tóth, ‘The Memory of the State Award in the Narratives of Women Workers’ in *Regimes and Transformations: Hungary in the Twentieth Century*, ed. István Feitl and Balázs Sipos (Budapest: Napvilág, 2005); Sándor Horváth, ed. *Mindennapok Rákosi És Kádár Korában: Új Utak a Szocialista Korszak Kutatásában* (Budapest: Nyitott Könyvműhely, 2008).

⁴⁸ Mark Pittaway, ‘Introduction: Workers and Socialist States in Postwar Central and Eastern Europe’, *International Labor and Working-Class History* 68, Fall (2005): 1–8, 1.

⁴⁹ Mária Kovács, *Liberal Professions and Illiberal Politics: Hungary from the Habsburgs to the Holocaust* (Washington: Woodrow Wilson Center Press, 1994); Hoffman, ‘Professional Autonomy Reconsidered’, 1997.

rehabilitation treatment, on choosing educational options for polio patients and on the way children, later grown up to be disabled adults, thought about their place in society. Disability historians like Catherine Kudlick have argued for the use of disability 'as a key defining social category on a par with race, class and gender',⁵⁰ and I use this lens to analyse the meaning of production and how it was paired with the relegation of disabled bodies to seclusion both physically and socially. Furthermore, I look at the way in which the obsession with production affected the changing meaning of polio itself. In this I draw upon the work of a wide array of scholars, such as Susan Sontag, Charles Rosenberg, Emily Martin and Daniel Wilson, who have shown how the metaphors, names and meanings used in conceptualising illness and its effect on the body shape medical treatment, the experience of disease and the place of the patient in society.⁵¹

Scientists, parents and children worked within and challenged the political, social and medical systems in which their lives were integrated. Virologists and physicians drew on their transnational relations and personal network to be participants in international conferences and study trips and to gain knowledge of cutting-edge research and technology. Parents smuggled vaccines, if necessary; children openly resisted medical procedures; and both crossed the Iron Curtain in hope of a better treatment option. Patients obtained skills in operating intricate respiratory machines and reinterpreted childhood games to include all levels of mobility. When the state lost interest in polio, they became depositories of medical knowledge.

Polio shaped and overrode Cold War policies and forged unlikely alliances. Doctors and politicians watched the rising numbers of epidemic cases with growing concern, while parents feared the summer lest it should bring polio. Even today, over two decades after the end of the Cold War, the memory of the fear that children might contract the disease in swimming pools and other summertime activities is still very much alive, as it has been handed down to generations with no immediate experience of polio.

With its focus on polio in 1950s Hungary, this book shifts attention from the two superpowers to focus on the circulation of medical knowledge and technology in global contexts. It uncovers cooperation where animosity would be expected, and finds continuities in the place of traditional watersheds in Cold

⁵⁰ Catherine J. Kudlick, 'Disability History: Why We Need Another "Other"', *American Historical Review* 108, no. 3 (2003).

⁵¹ Susan Sontag, *Illness as Metaphor and AIDS and Its Metaphors* (New York: Picador, 1990); Emily Martin, *Flexible Bodies: Tracking Immunity in American Culture—from the Days of Polio to the Age of AIDS* (Boston: Beacon Press, 1994); Daniel J. Wilson, *Living with Polio: The Epidemic and Its Survivors* (Chicago: University of Chicago Press, 2005); Charles Rosenberg and Janet Golden, eds., *Framing Disease: Studies in Cultural History*, 2nd edn (New Brunswick: Rutgers University Press, 1997).

War history. Thus, the book aims to enrich our understanding of what the Cold War was, among whom it was 'fought', and in what ways it did and did not affect public health policies, research and medical treatment. It asks if it was possible to operate outside the framework of the Cold War in countries fully involved in the political and military conflict.

The history of polio in Hungary matters. It presents another face of the global Cold War, a new perspective on our view of communist societies and an important moment in the history of medicine and global public health, all of which have repercussions for the present. More importantly, this history links the personal, national and institutional stories of an effort to meet a global epidemic challenge in an increasingly divided world all too familiar to today's reader.