



SIMON WIESENTHAL LECTURE

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**HOLOCAUST LANDSCAPES:
MAPPING GHETTOIZATION IN HUNGARY**

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I've always been struck by something that one of the pioneering post-war historians of the Holocaust, Philip Friedman, wrote in a co-authored *Guide to Jewish History* jointly published by Yad Vashem and YIVO back in 1960. Setting out what they saw as the basis for future historical study of the Holocaust, Friedman and Jacob Robinson advised scholars that, 'a careful examination of the ghetto maps is...of utmost importance in the study of the trends and objectives of Nazi ghetto planning,' and made a series of suggestions for historians making use of these cartographic sources:

...a comparison of the ghetto maps with the city maps can help the student to decide whether there was a Nazi master-plan to locate the ghettos in the periphery of a town, in its dilapidated and overpopulated suburbs, or in those sections which were destroyed by military operations. A comparison of the ghetto area with the "Aryan" section of a town will show the relationship between density of population and available living space for Jews and non-Jews, and thus reveal a pattern of overcrowding the Jewish ghettos. A study of the ghetto and city maps will indicate whether gardens, squares and other recreation areas were permitted in the ghetto area. The ghetto maps themselves will show the non-Jewish enclaves (e.g. the Gypsy ghetto in Łódź) and intimate why they were placed there by the Nazis. On September 21, 1939, Reinhard Heydrich recommended that the ghettos be placed near railroads in order to facilitate the deportations of the Jews. The ghetto maps may indicate whether this recommendation was accepted by local authorities. This does not exhaust their usefulness. They also reveal a peculiar feature of Nazi ghetto planning: the simultaneous creation in several towns of two or even three ghettos, with either no communication between them, or with very little... The maps also show the frequent changes the Nazis made in the ghetto areas, almost all of which were meant to worsen the existing facilities, narrow the available space, or move the inmates to new sites...¹

Their words informed an earlier study of mine – *Holocaust City* (2003) – that examined the motivations of ghetto planners in Budapest by exploring the changing shape of the ghetto there.² But they are also words that I've had echoing in my ears for the last decade or more looking at – and more recently, making and analysing – maps of Hungarian Jewish ghettos.³

¹ Jacob Robinson & Philip Friedman (eds.), *Guide to Jewish History Under Nazi Impact* (Jerusalem & New York: Yad Vashem & YIVO, 1960) 74.

² Tim Cole, *Holocaust City. The Making of a Jewish Ghetto* (New York: Routledge, 2003)

³ Tim Cole, *Traces of the Holocaust. Journeying in and out of the Ghettos* (London: Continuum, 2011). See also Anne Kelly Knowles, Tim Cole & Alberto Giordano (eds.), *Geographies of the Holocaust* (Bloomington, Indiana University Press, forthcoming 2013)

Some maps from 1944 survive – drawn up by local officials charged with identifying where to place the ghetto in their town or city. One map survives from Budapest of the closed Pest ghetto created in the winter of 1944. More maps survive from Tolna county, where a complete set of maps were drawn up in May 1944 showing the location of the ghettos in the eight towns in the county which had been chosen as places of Jewish concentration. I start off this evening looking at two of those maps drawn up in May 1944 in order to explore broader issues of importance in understanding the rapid implementation of the concentration and deportation of Hungarian Jews so late on in the war in the spring of 1944, following the German occupation of its wartime ally.⁴

However, most of the 150 or so ghettos in Hungary appear not to have been mapped out cartographically at the time, or at least if they were, those maps have not survived. Most were delineated textually, in ghetto orders which listed where in the town or city Jews were to live. In the second half of the lecture I want to think about why we might want to map out these sites – or, to put it another way, visualize largely textual records – and reflect on the potential of applying geographical methodologies to Holocaust studies. Here I draw on collaborative work recently undertaken with a Geographic Information Scientist based in Texas, Alberto Giordano, as part of a broader interdisciplinary research team exploring Holocaust Geographies. But before I talk through some of the mapping that Alberto and I have done over the last couple of years, let me start with two maps drawn up by local officials involved in implementing Holocaust ghettos.

Map 1 - Hőgyész

In May 1944 a clerk sketched out a map of the two broad ghetto areas in Hőgyész. Like seven other clerks across Tolna county,⁵ this clerk drew a map because of a request from the deputy prefect of the county. On 11 May 1944 he issued two orders implementing the national ghettoization decree within his county.⁶ The first, as was the practice elsewhere, outlined which towns and cities were to have ghettos. Local officials in these eight places were given some of the practical regulations relating to ghettoization in this order, with further details following in a supplementary order published on the same day that outlined the nitty-gritty of the construction and day-to-day running of

⁴ On this, see Cole, *Traces of the Holocaust*, chapter four

⁵ For copies of all eight, see Hungarian National Archives (O.L.), I 133. These are reproduced in János Balog (ed.), *Évszázadokon át. Tolna Megye Történetének Olvasókönyve III* (Tolna: A Tolna Megyei Levéltár, 1990); Braham, *Politics of Genocide*, 796 refers to these maps in a footnote.

⁶ O.L., I 133, 8.100/1944, Tolna county deputy prefect (11 May 1944); 8.101/1944, Tolna county deputy prefect (11 May 1944).

the county's ghettos. Point number 28 in a long list of detailed instructions ordered local authorities to provide four copies of a name list of the Jews living in each building in the ghetto along with two copies of a ghetto map.⁷

This call for multiple copies of lists and maps reflects the breadth of distribution of this paperwork to interested parties. The local town council and chief constable of the district were to receive copies of both the map and the name lists. Jewish house commanders – responsible for ensuring order and cleanliness within the ghetto – and the gendarmerie, or in the case of cities the police district station, were to get only the name lists.⁸ Armed with both the map and housing list, local officials were able to pinpoint the precise whereabouts of Jews. As Patrick Joyce notes of a different time and place, 'the modern map is essential to power and to the practices of rule.'⁹ Ghetto maps and their accompanying lists were instruments of territoriality – the exercise of 'power with the help of maps' through spatial control.¹⁰ The local authorities knew where any one of over five thousand individuals were at any one time, which was particularly important in this county where there were rather too many ghettos.

But this map from Hőgyész was unusual. It was the only one of the eight maps from Tolna where in a sense the different data provided on the name list and map overlapped, or at least they did in the case of one individual. Drawing up the ghetto map here, the clerk carefully marked out the 'temporary residence' of Dr Lajos K. on the map and its accompanying key.¹¹ He is the only individual named on any of the Tolna county maps. Everyone else was named simply in the lists that accompanied these ghetto maps – and were designed to be read alongside them. Dr Lajos K. was exceptional in living – temporarily – outside the ghetto rather than being housed in the ghetto areas delineated on the map. He was a Jew living outside – rather than inside – the ghetto, although his whereabouts was still under the control asserted through mapping.

His place on the map was a result of his profession. He was a medic.¹² It is not surprising to find a Jewish doctor in a town like Hőgyész in 1944. In the 1930s, over half of all doctors in Hungary were Jews, with the proportion even higher in towns and cities outside the capital.¹³ The

perceived over-representation of Jews in the medical profession drew the ire of radicals who pressed for limits on the numbers of Jewish doctors in interwar Hungary.¹⁴ However, once ghettoization got underway the large number of Hungarian communities reliant on Jewish doctors faced a dilemma. In the city of Nagyvárád in Transylvania, local officials reported that placing Jewish doctors into the ghetto there 'had temporarily aggravated the healthcare situation in the city,' which was a complaint echoed elsewhere.¹⁵ In Hőgyész – and it seems that this was not the only such place – a temporary local solution was adopted in May 1944 that allowed Dr Lajos K. to live and work outside the ghetto.¹⁶ He may well have been the only doctor in this town by the early summer of 1944 and so the segregatory logic of ghettoization was pragmatically done away with to ensure that the sick in the town could continue to see a doctor. But despite local murmurings, national officials took a hard line. On 23 June, when Jews across the country were housed in ghettos or had already been deported, national legislation was introduced forbidding Jewish doctors from treating non-Jewish patients and secretary of state in the Interior Ministry László Endre rejected calls that Jewish doctors be spared from deportations.¹⁷ On the map, Dr Lajos K.'s place outside the ghetto was clearly marked as 'temporary.'

However other Jews were more permanently removed from ghettos. What the map doesn't show, but what does emerge clearly from looking at the accompanying name lists that survive from some places, is that these ghettos were markedly gendered spaces. Ghettos across Europe tended to have majority female populations. But this is particularly striking in Hungary given a history that predates the German occupation in 1944 of calling up Jewish men to labour service in the Hungarian Army. When Hungary entered the war on the side of the Axis powers on 27 June 1941, plans for separate Jewish labour battalions were implemented and Jewish men aged 20-42 years were

on to the Holocaust' in Beate Kosmala & Feliks Tych, (eds.), *Facing the Nazi Genocide: Non-Jews and Jews in Europe* (Berlin: Metropol, 2004) 239, notes that the proportion of Jewish doctors in Budapest was 38% compared to the national average of 55.2%; Stark, T., *Hungary's Human Losses in World War II* (Uppsala: Center for Multiethnic Research, Uppsala University, 1995) 9, estimates that 60% of doctors were Jewish in 1920.

¹⁴ Gábor Kádár and Zoltán Vági, 'Rationality or Irrationality? The Annihilation of Hungarian Jews,' *The Hungarian Quarterly* 35, 174 (2004), 45. See also Kovács, M., *Liberalizmus, Radikalizmus, Antiszemitizmus. A Magyar Orvosi, Ügyvédi és Mérnöki Kar Politikája 1867 és 1945 között* (Budapest: Helikon, 2001).

¹⁵ Kádár and Vági, 'Rationality or Irrationality?', 47-8.

¹⁶ Tim Cole, 'Building and Breaching the Ghetto Boundary: A Brief History of the Ghetto Fence in Körmen, Hungary, 1944,' *Holocaust and Genocide Studies* 23, 1 (2009) 54-75.

¹⁷ Kádár & Vági, 'Rationality or Irrationality?', 46-8, who see this as evidence of 'those in power' giving preference to 'the solution of the Jewish question' over the 'interests of production.'

⁷ I 133, 8.101/1944 Tolna county deputy prefect (11 May 1944).

⁸ I 133, 8.101/1944, Tolna county deputy prefect (11 May 1944).

⁹ Patrick Joyce, 'Maps, blood and the city. The governance of the social in nineteenth century Britain,' in Patrick Joyce, (ed.), *The Social in Question. New Bearings in History and the Social Sciences* (London: Routledge, 2002) 99.

¹⁰ J.B. Harley, 'Deconstructing the Map,' *Cartographica* 26, 2 (1989) 12.

¹¹ I 133, Map of central Hőgyész.

¹² Cf. I 99, 2502/1944, pass 1 (23 May 1944). On this see Cole, *Traces of the Holocaust*, chapter five.

¹³ Braham, *Politics of Genocide*, 76, estimates that 55.2% of doctors were Jews; Krisztián Ungváry, 'Robbing the Dead: The Hungarian Contributi-



called up to serve in auxiliary labour service units for a period of two years. In what can be seen as a compromise solution of sorts, Jewish men were to serve in the military like non-Jewish men, but – critically – they were to be unarmed. Hungarian Jewish men were sent to the Eastern Front, where they suffered especially harsh conditions and high casualty rates.¹⁸

However, this story of labour battalion service as gendered threat changed dramatically during the early summer of 1944. Not only did the ghettoization decree issued at the end of April 1944 explicitly exempt Jewish men already serving in labour battalions from being placed into ghettos,¹⁹ but as ghettoization was implemented, new waves of conscriptions took place. This was a cause of concern to Gendarmerie Lieutenant Colonel László Ferenczy who oversaw the concentration and deportation process. He wrote to his superiors in the Interior Ministry in Budapest in May and June complaining about Jewish men being removed from ghettos and transit camps by the Hungarian military.²⁰ As a result of these call-ups, hundreds and hundreds of Jewish men were removed from those ghettos that had not yet been liquidated. Instead of being deported, Jewish men in their late teens, twenties, thirties and forties served out the war in labour battalions.

Prior to the arrival of Hungarian Jews at the ramp at Auschwitz-Birkenau then, a pre-selection of sorts had been taking place within Hungary. The Hungarian state had already selected those Jews – young adult men - that it deemed fit for labour. The end result was that the Jews arriving at Auschwitz Birkenau were primarily children, women and the elderly, as can be seen from looking at the gender and age profile of the Jews deported from two ghettos in western Hungary – Veszprém and Körömend.²¹ The death rates of Hungarian Jews at Auschwitz were so high in large part because adult males were not on the deportation trains. The Hungarian state saw Jewish men as too valuable to offer to the German state. Jewish women were another matter entirely.

As Randolph Braham has reflected, ‘it is one of the ironies of history that the Ministry of Defense, which had been viewed as one of the chief causes of suffering among [male] Jews during the previous four to five years, suddenly emerged as the major governmental institution actively involved in the saving of Jewish lives.’²²

¹⁸ On the labour service system, see Braham, R., *The Hungarian Labor Service System, 1939-1945* (New York: Columbia University Press, 1977) and Braham, *Politics of Genocide*, 294-380.

¹⁹ 1.610/1944. M.E. (28 April 1944), paragraph 8, no. 4.

²⁰ USHMM, RG-52.009.04/2, Ferenczy report to Interior Ministry (29 May 1944), para. 7, para. 12; USHMM, RG-52.009.04/1, Ferenczy report to Interior Ministry (12 June 1944), para. 5

²¹ On this, see Cole, *Traces of the Holocaust*, chapter one.

²² Braham, *Politics of Genocide*, 352 and 1122, where Braham notes that, ‘the institutional approach... was more effective in saving Jewish lives.

However his claim that, ‘it is safe to assume that many local commanders, aware of the realities of the ghettoization and deportation program and motivated by humanitarian instincts, did everything in their power to rescue as many Jews as possible,’ remains relatively unsubstantiated across the country as a whole.²³ I remain more convinced by his signaling of more pragmatic motivations resulting from ‘the manpower shortage from which the country was suffering at the time.’²⁴ This, for Krisztián Ungváry, was more critical, arguing that, ‘sparing the Jews certainly was not the intention of those Hungarians responsible, but rather exploiting Jewish work power and expertise (physicians, pharmacists, etc.) “for free” and for as long as possible.’²⁵ Here is the link, I think, between the two ghetto areas on the Hőgyész map being gendered spaces and the marking on the map of the ‘temporary residence’ of Dr Lajos K. Both medics and Jewish men from their teens through late forties were seen to be too valuable to place behind ghetto walls. Here is evidence of the opportunism and economic pragmatism that others – in particular Gábor Kádár and Zoltán Vági – have seen as characterizing the implementation of the Holocaust in Hungary, and I have pointed to in my own work, which leads me on to my second map from Tolna county.²⁶

Map 2 – Tolna

This time it is the town of Tolna, and a map that is perhaps particularly striking given the patchwork shape of the ghetto here which was made up of a series of separate houses on Árpád utca and a single outlying house on Szedresi utca. That ghettoization was dispersed both here, and to a lesser extent in Hőgyész, is not that surprising. The national legislation ordering ghettoization in Hungary left the practical details of where ghettos were to be placed up to local officials, and explicitly gave them the freedom to use individual houses, specific streets, or entire sections

Among the agencies of the government that contributed toward this end were the Ministry of Defense, which recruited able-bodied Jewish males into the labor service system...’ See also Braham, *The Wartime System of Labor Service*, vii-viii, where Braham notes the irony that, ‘when the Final Solution program was launched... the labor service system became refuge for many thousands of Jewish men. While the newly established quisling government of Döme Sztójay virtually surrendered control over the Jews to the SS, the labor service system continued to remain under the jurisdiction of the Hungarian Ministry of Defense. As a result the labor servicemen were not subjected to the ghettoization and deportation that took place during April-July 1944.’

²³ See on this point more broadly, Braham, *Politics of Genocide*, 349-65, 969-71, 1368-70.

²⁴ Braham, *Politics of Genocide*, 352-353.

²⁵ Ungváry, ‘Robbing the Dead,’ 254-5.

²⁶ See especially Gábor Kádár & Zoltán Vági, *Self-financing Genocide. The Gold Train, the Becher Case and the Wealth of Jews, Hungary* (Budapest: Central European University Press, 2004); Cole, *Holocaust City*; Cole, *Traces of the Holocaust*.



of the town or city.²⁷ The core principles of ghettoization were clear: Jews were to be concentrated and segregated, but the precise shape of ghetto was left to local officials (albeit under central supervision) to determine.

What is clear in Tolna is that a patchwork ghetto was created in order to minimize the impact of segregation on the non-Jewish population. Ghettoization – especially at the scale of an entire section of the city – was something that not only meant that Jews had to move into the ghetto area, but non-Jews had to move out. In Tolna, local officials sought to minimize the need for non-Jews to relocate by neatly sidestepping non-Jewish owned houses along Árpád utca.²⁸ Here, and it is true elsewhere as I want to talk more about in a moment, private property rights shaped ghettoization, rather than being reshaped by it. One way to achieve this was to make use of Jewish owned property. In Tolna, eight of the nine ghetto houses were Jewish owned.²⁹ But another way was to eschew residential property entirely – something you also see being done elsewhere. In Tolna, alongside making use of eight Jewish owned houses, the local authorities also utilized the former gendarme barracks at Árpád utca 7. This building formed the heart of the ghetto. It explains why it was this street rather than others in the town that was chosen as the main spine of the ghetto. The attraction of Árpád utca appears to have been the former barracks building that was so physically large in this town made up of small family homes rather than large apartment buildings. According to the name lists drawn up once the ghetto in Tolna was established, this one building housed 128 Jews, or just over one third of the total ghetto population. In short, it kept the number of Jewish houses to a minimum, which fitted with the concerns expressed by the deputy prefect when offering clusters of houses or freestanding buildings as an option when ‘local conditions’ made this necessary. Size mattered. Ghettoization was seen as spatial concentration as well as spatial segregation.

But, and this is something that I want to return to again when I look at Budapest, segregation in dispersed ghettos like Tolna worked in multiple ways. Not only did it separate Jews from non-Jews, but also Jews from other Jews. In Tolna, each of these individual ghetto houses were, in effect, ‘micro ghettos,’ separated out from nearby or even neighbouring ghetto houses. The house at Árpád utca 12 housed four extended families along with one extra person to make up the numbers, who lived one family to a room, with a shared kitchen and bathroom. Although the neighbouring house was also part of the dispersed ghetto in Tolna, these were entirely separate places. The 18 Jews

living at Árpád utca 12 were in reality cut off not only from the non-Jews living in the house to one side of them, but also from the Jews living in the house to the other side.

There were limited opportunities for exchange with other Jews and non-Jews. One woman, Mrs Izidor K., regularly left the house to shop along with seventeen other Jews who left their ghetto houses across the town between ten and twelve on market days and three and five on other days.³⁰ Other women left the house more sporadically, as was the case elsewhere in labour gangs doing agricultural work.³¹ It was at moments like these that there was the possibility for some contact between Jews separated out into self-contained micro ghettos. But multiple and dispersed ghettos that were adopted in a number of places in Hungary (out of concerns to limit the impact of ghettoization on the non-Jewish population) separated Jews from other Jews. This was most marked in the Hungarian capital Budapest where a highly dispersed form of ghetto was created in the summer of 1944.

Map 3 – Budapest

Predating this highly dispersed form of ghettoization, earlier plans had suggested multiple ghetto areas. In early May 1944, city officials had aimed to clear Jews from major streets and squares in Buda (13 streets and 5 squares) and Pest (19 streets and 8 squares) and relocate them into seven ghetto areas – three in Buda and four in Pest.³² In these demarcated areas, Jews were to be assigned to poor quality, high rent apartment buildings. However, just over a month later – in mid June - a far more dispersed form of ghettoization was ultimately adopted.³³ Jews were to live throughout all districts of the city but were to be restricted to 2,639 specified apartment buildings — largely those already owned by, and lived in, by Jews. In its emphasis on concentrating Jews in buildings where they already lived, the June 16 plan was shaped by the pragmatic concern of limiting the number of relocations, particularly for non-Jews.

Despite this, the plan met with immediate, wide-spread resistance. The mayor of Budapest was overwhelmed with petitions from individuals protesting the specifics of the ghetto plan. The majority of these petitions came from

²⁷ O.L., I 149, undated handwritten list.

²⁸ O.L., I 149, 9060/1944 (30 May 1944). See also Cole, ‘Buildings and Breaching the Ghetto Boundary.’

²⁹ O.L., K 148, 3410 cs. (May 9, 1944).

³⁰ Budapest Székesfőváros Polgármestere 147 501-514/1944 IX published in *Budapesti Közlöny* 95 (April 28, 1944), the local press and on wall posters. See also Ilona Benoschofsky & Elek Karsai (eds.), *Vádirat a Náciizmus Ellen. Dokumentumok a Magyarországi Zsidóüldözés Történetéhez. 2. 1944 Május 15-1944 Június 30 A Budapesti Zsidóság Össze-költözötése* (Budapest: A Magyar Izraeliták Országos Képviselőlete Kiadása, 1960) 203-22.

²⁷ 1.610/1944, M.E. (28 April 1944).

²⁸ O.L., I 147, 2.368/1944, Tolna chief constable (30 May, 1944).

²⁹ O.L., I 147, 2.368/1944, Tolna chief constable (30 May, 1944); I 149, 9060/1944, undated handwritten name lists.



non-Jews requesting the removal of their property from the ghetto list, and from Jews requesting the addition of their property to the list. In both cases, petitioners hoped not to be dislocated from their homes. A small number of non-Jews requested the inclusion of their property on the ghetto list in hopes of being able to exchange a poor quality apartment for a vacated Jewish apartment in a better building. Another set of petitions came from coalitions of Jewish and non-Jewish residents who called for a new ‘mixed status’ to be applied to their apartment building so that all of them could stay put.³⁴ The furor prompted a week of door-to-door surveys to clarify proportions of Jewish and non-Jewish residents. On June 22, a new list of 1,948 ghetto houses was issued, which included both cancellations and new designations.³⁵

At the end of November 1944, two much more concentrated ghettos were established in place of the dispersed ghetto of the summer and fall. The fenced ghetto on the Pest side of the Danube River was centered on the main synagogue in the city’s traditional Jewish area. The so-called ‘International ghetto’ was a collection of individual apartment buildings spread over a number of streets in the Újlipótváros district close to the Danube, which came under the protection of a number of neutral powers, most significantly the Swedish and Swiss. Here, Jews with paperwork granted by the neutral legations were housed separately from so-called ‘unprotected Jews.’ Ultimately both ghettos were liberated in mid-January 1945 by Soviet troops.³⁶

In earlier work on Budapest, I examined the shifting shape of the ghetto across 1944 as a way to understand the changing motivation of the city’s “doctors of space” — borrowing a term from the work of Henri Lefebvre — who restructured residential and public space along racialized lines.³⁷ I was interested in highlighting the ways in which ghettoization was variously seen as a policy of creating sites of Jewish absence, achieved by ‘cleansing’ parts of the city by removing Jews to ghettos, and of creating sites of Jewish presence, by concentrating Jews in particular places in the city. Shifts between the two reflected the move from utopian planning and concern about the socio-economics of ghettoization to policies of pragmatism.³⁸ In this work I emphasized the very different shapes of ghettoization as it was planned and then implemented across the summer, fall and winter of 1944.

³⁴ Cole, *Holocaust City*, ch. 6.

³⁵ Budapest Székesfőváros Polgármestere 148 451-452/1944 IX published in *Budapesti Közlöny*, the local press and on wall posters. See also Benoschofsky & Karsai (eds.), *Vádirat a Nácizmus Ellen 2*, 293-8.

³⁶ Cole, *Holocaust City*, ch. 8.

³⁷ Henri Lefebvre, *The Production of Space*, trans. by Donald Nicholson-Smith (Oxford: Blackwell, 1991).

³⁸ Cole, *Holocaust City*, esp. chs. 4-6, 8.

However while my earlier work did contain maps, these only marked Jewish-designated buildings as points on a map, without taking into account the variations in population density in a city whose residential architecture ranged from large apartment buildings to single family homes.³⁹ One way to try to represent this is to ‘weight’ buildings by the number of residents to capture the diversity of residential properties and population density. This is not an easy task to undertake without the immensely time consuming job of extracting building-level data from the hard copy of individual census returns. To overcome this problem, Alberto and I used published data from the 1941 Hungarian population census that summarized population density by districts,⁴⁰ to project values of residential density to Jewish-designated residences within each district.

Integrating some sense of the different nature of building stock across districts into mapping suggests that the visible changes to the shape of the ghetto across 1944 were not as marked as unweighted visualizations show. To give just one example, using a variety of tools of spatial analysis (mean center analysis, directional distribution, standard distance)⁴¹ points to remarkable continuities across the turbulent week in June 1944. It is striking that the mean center of ghettoization for June 16 and June 22 hardly shifted at all.⁴² Another way to visualize this is to use kernel density analysis.⁴³ While it is clear that Jewish-designated residences were becoming increasingly concentrated —with the disappearance of the local high in District XIV and the general shrinkage of the high density area in Districts V, VI, VII, and VIII — kernel analysis validates the results of the mean center, directional distribution, and standard distance analysis, suggesting that there were marked continuities across this turbulent week in mid June. Indeed, this story of continuities can be seen to extend across 1944 as a whole. Not only does kernel density analysis at the city scale closely align with two of the largest of the planned ghetto areas from May 9, but also with the location of the

³⁹ See Cole, *Holocaust City*, 106, 160

⁴⁰ Lajos Illyefalvy (ed.), *Budapest Székesfőváros Statisztikai Évkönyve XXX* (Budapest: Budapest Székesfőváros Statisztikai Hivatalának Kiadása, 1942).

⁴¹ Mean center analysis identifies the geographic center of a distribution, shown as a solid circle on the map. Directional distribution finds the overall directional pattern of the data. Standard distance measures the degree of concentration; the larger the circle, the more dispersed the locational pattern.

⁴² Likewise, the orientation stayed the same, with a prevailing east-west trend that mirrored the overall residential patterns of the city. The only measure that changed was a slight shift toward increased concentration in the June 22 list, as indicated by the smaller circle marking standard distance for that date.

⁴³ Unlike the mean center, standard distance, and deviational ellipse, which return a single value, kernel analysis calculates a density surface around points or areas, returning a set of continuous values. The result is a more detailed representation of the phenomenon under study.



two ghetto areas established in Pest at the end of November and beginning of December 1944.

Utilizing a variety of spatial analytical techniques suggests that there were greater continuities in ghettoization in Budapest than might be imagined when considering simply the seemingly radically different spatial strategies adopted (7 ghetto areas in May, 2,639 ghetto houses on June 16, 1,948 ghetto houses on June 22 and 2 ghetto areas in November/December) in both plans and policy during 1944. Rather than emphasizing changes in ghettoization in terms of shifting concerns with absence and presence, as I did in previous work, weighted mapping and making use of a variety of tools of spatial analysis points to a dominant story of continuities in ghettoization throughout 1944 that drew upon (and hardened) a longer history of Jewish demographic patterns in Budapest. Jews had historically resided in much greater numbers, and higher proportions, in districts V, VI, VII and VIII than in the rest of the city. The increased concentration of Jewish residences in central Pest was a change in the degree but not in the kind of residential patterns that had prevailed for many years. The dominant idea that remained constant throughout the process of ghettoization in Budapest was taking the ghetto to the Jew, rather than taking the Jew to the ghetto.⁴⁴ While ideology is a part of this story — a notion of the Jew's place in the city — bringing the ghetto to the Jew signaled the persuasiveness of pragmatic concerns that ghettoization avoid displacing non-Jews.⁴⁵

Ultimately in Budapest, the desire to avoid displacing non-Jews led to a major concession being granted, which allowed non-Jews to remain living in their apartments within ghetto buildings. Three days after the definitive list of ghetto properties was issued on 22 June, regulations were published stipulating, among other things, when Jews could leave these ghetto properties. The eighth point in a long list of regulations forbade non-Jews from allowing Jews to enter 'for no matter how brief a period into either Christian houses or the Christian-tenanted portions of Jewish houses.'⁴⁶ It would seem that relatively large numbers of non-Jews chose to stay in their apartments in ghetto houses. The journalists Jenő Lévai's post-war claim that 12,000 non-Jews lived in ghetto houses is impossible to substantiate, but it may well not be far off the mark.⁴⁷ In the area of the city which later became the site of the

closed Pest ghetto in the winter of 1944, 144 of the 162 ghetto houses there were lived in by non-Jews as well as Jews.⁴⁸ It would seem that the 1,948 ghetto houses that made up the shape of Jewish residence in Budapest throughout the summer and into the fall of 1944 were in reality 'mixed houses.' The scale at which the ghetto was implemented was, in practice, the scale of the individual apartment — a scale where segregation was very difficult to police.

In this context, I have come to rethink my sense of what ghettoization in Budapest meant on a day-by-day basis. Ghettoization during the Holocaust is generally imagined as a simultaneous process of both concentration and segregation. Jews were placed in increasingly physically concentrated living quarters and were separated from the non-Jewish population through the creation of closed and guarded boundaries.⁴⁹ However, while concentration appears to be the norm where ghettos were set up, the extent and nature of segregation varied from place to place. As I have already suggested in the case of Tolna, dispersed forms of ghettoization meant that Jews were not only segregated from non-Jews but also from other Jews. In Budapest GIS allows us to map out 'invisible walls' within this dispersed ghetto that limited Jewish access to both people and places in the city. In this context, there appears to be evidence of the increased importance of Jewish and non-Jewish social networks within apartment buildings.

Each of the just under two thousand individual ghetto house in Budapest in the summer and early fall of 1944 (dubbed yellow star houses because they—like Jewish bodies—were marked with a large yellow star) was a discrete bounded 'ghetto.' However this boundary was permeable, initially for three hours each day when Jews were permitted to leave their homes between the hours of 2-5 pm.⁵⁰ Later on this three hour window was extended.⁵¹ There were legislative limits to where Jews could go: they

⁴⁴ New Hungarian Central Archives [ÚMKL] XXXIII-5-c-1, XI.23.

⁴⁹ Raul Hilberg, *The Destruction of the European Jews* (New Haven: Yale University Press, 2003) 237

⁵⁰ M. kir. Rendőrség budapesti főkapitánya 7200/fk.eln.1944 sz., reproduced in Ilona Benoschofsky & Elek Karsai, *Vádirat a Nácizmus Ellen. Dokumentumok a Magyarországi Zsidóüldözés Történetéhez*. Volume 2 (Budapest: A Magyar Izraeliták Országos Képviselőlete Kiadása, 1960) between 304-5. For a translation see Braham, *Politics of Genocide*, 855-6.

⁵¹ In early July, Jews were permitted to leave their homes for six hours each day—from 11am on weekdays and from 9am on Sundays. In early September, while Jews could still leave their homes from 9-3 on Sundays, the hours when they could leave their homes on other days was restricted from 12-5, before returning to the hours of 11-5 later on in the month. See Braham, *Politics of Genocide*, 855-6; Ernő Munkácsi, "Hogy történt? XXXI A Budapesti Zsidóság Összeköltöztetése", *Új Élet* II/32 (8 August 1946) cited in Benoschofsky & Karsai, *Vádirat a Nácizmus Ellen*. Volume 2, 348; *Esti Ujság* (8 July 1944); *Függetlenség* (9 July 1944), *Összetartás* (3 August 1944); Raoul Wallenberg Project Archive, University Library Uppsala (RWPA) F2C 21/535, Alfred Schomberger; *Esti Ujság* (22 September 1944).

⁴⁴ Tim Cole, 'Contesting and Compromising Ghettoization: Hungary, 1944' in Jonathan Petropoulos, Lynn Rapaport and John Roth (eds.), *Lessons and Legacies VIII* (Evanston: Northwestern University Press, 2010) 152-66; Cole, *Traces of the Holocaust*, chs. 3-4.

⁴⁵ Here our work confirms the thrust of Cole's earlier emphasis in *Holocaust City*, esp. ch.5.

⁴⁶ Randolph L. Braham, *The Politics of Genocide. The Holocaust in Hungary* (New York: Columbia University Press, 1994) 737-8.

⁴⁷ Jenő Lévai, *Fekete Könyv a Magyar Zsidóság Szenvedéseiről* (Budapest: Officina, 1946) 156; Braham, *Politics of Genocide*, 735.

could leave their apartment buildings only to go shopping, receive medical attention or bathe, and were forbidden from entering into non-designated apartment buildings.⁵² But there were also (shifting) practical limits to where Jews could physically go in the city, given the temporal limits when they could leave their apartments.⁵³ The importance of physical distance emerges from mapping out walking distances within the dispersed ghetto in Budapest.⁵⁴ Alberto and I used network analysis to calculate the shortest distance (the ‘least-cost’ route) between each Jewish residence and critical places to access: other Jewish residences, the nearest market hall, the nearest hospital, and the Swedish legation. Here we worked with the assumption that Jews used the most direct routes to get to their destinations in order to arrive as quickly as possible and avoid the queues that survivors recall,⁵⁵ but it may be that they chose instead to use side streets to avoid non-Jews and officials. Given this caveat, the maps produced from the GIS showing travel time between key destinations need to be read as suggestive models rather than representing reality.

Mapping walking times from destinations suggest that a series of ‘invisible walls’ existed within this dispersed ghetto, limiting where Jews could get to. This can be seen in the mapping of 30-minute and 60-minute walking distances to the main market halls, the offices of the Swedish legation, and the hospitals permitted for Jewish use. Taken together, these maps convey the extent and implications of dispersion within this ghetto that stretched across the city with houses designated in all fourteen of the city’s wartime districts. Visualizing Budapest in terms of the time it would take to walk to and from a range of key points, reveals how this ghetto that stretched from the outskirts of Buda to the outskirts of Pest can be conceptualized as a divided space. It was physically impossible to walk across the entire ghetto area within the three hour window initially permitted to make that journey and return again. Naomi Gur, who was 14 in 1944 remembered running on her way back from the hospital in Buda where she’d been taking kosher food to her mother in order to get back home to her yellow-star house in central Pest before 5pm.⁵⁶ Given the degree of dispersion and the temporal limits placed on Jewish access to the public space of the city, Jews were

limited in how far they could go, and therefore where they could go. However, as the maps suggest, the nature and extent of inaccessibility was not uniform but varied according to where in the city Jews lived.

Confined to apartment buildings, initially for twenty one hours a day, fearful of being exposed to abuse on the streets,⁵⁷ and—as the mapping suggests—spatio-temporally limited in where they could go when they were permitted to leave the building, there was a turn inwards and a shrinking of lived space.⁵⁸ This inward turn took place in the broader context of a city at war that experienced frequent aerial bombardment from the spring of 1944 onwards. The individual apartment building — itself in effect a ‘micro ghetto’ — increasingly became the operational scale at which day-to-day life was lived. Outside of their apartments, survivors recall the courtyards, stairways, internal balconies and even the rooftop as crucial sites of exchange within these ghetto houses.⁵⁹ TK told me of days spent playing bridge with other teenagers sitting on the internal balcony overlooking the internal courtyard.⁶⁰ Judit Brody remembered that, ‘after dark we dragged chairs out onto the corridor that ran the length of the building. Parents say on the third floor discussing the day’s events, the state of the war and other important issues, children sat on the second floor...’⁶¹ Peter Tarjan, who was an eight-year-old boy at the time, recalled replacing his usual play-space of the street with the stairways and internal balconies of their seven storey apartment building which became the setting for games of cowboys and Indians.⁶²

But, within individual apartment buildings scattered across Budapest, there were not only intense interactions between Jews in the summer and early fall of 1944, but also between Jews and non-Jews given the last minute concession on the part of the authorities that allowed non-Jewish tenants to continue living in ghetto buildings. The continuing presence of non-Jews in ghetto houses radically re-frames our understanding of ghettoization as segregation. Here is a critical difference between ghettoization in Budapest, and for example, in the city of Warsaw. It was not only that ghettoization in Budapest was dispersed rather than taking the form of a single closed ghetto — at least until the creation of the Pest ghetto in the winter of 1944 — meaning that Jews were effectively separated from oth-

⁵² Braham, *Politics of Genocide*, 855-6.

⁵³ Our focus here is on the initial period when Jews could leave their homes for three hours, given both that this was the earliest plan and also that during the later period when Jews could leave their homes for longer stretches it appears from survivor testimony that in practice Jews sought to leave and return within as short a period of time as possible.

⁵⁴ University of California, Riverside, Department of Physics and Astronomy website.

⁵⁵ Ernő Szép, *The Smell of Humans* (Budapest: Central European University Press, 1994) 40; Correspondence with Judit Brody (11 June 2010)

⁵⁶ RWPA F2C 3/118, Naomi Gur.

⁵⁷ Gottlieb, *Becoming my Mother’s Daughter*, 62; Laura Palosuo, *Yellow Stars and Trouser Inspections: Jewish Testimonies from Hungary, 1920-1945* (Uppsala: Uppsala Universitet, 2008) 151-3; RWPA F2C 7/307 Miklósné Kellner; RWPA F2C 18/349, Erwin Forester; RWPA F2C 19/503 Peter Tarjan.; Szép, *The Smell of Humans* 19-20.

⁵⁸ Szép, *The Smell of Humans*, 10-32.

⁵⁹ Interview with Judit Brody (26 November 2009); RWPA F2C 16/339, Zsuzsa Gordon; RWPA F2C 11/340 Erzsébet Rosenberg; RWPA F2C 17/343, István Bélai; Szép, *The Smell of Humans*, 28.

⁶⁰ Interview with TK & JK (London, 19 November 2010).

⁶¹ Judit Brody, ‘Unpublished Memoir’ (n.d.).

⁶² RWPA F2C 17/343, István Bélai; RWPA F2C 19/503 Peter Tarjan.



er Jews, as well as non-Jews. It was also that the enacting of ghettoization in Budapest at the scale of the individual apartment, meant that the so-called ‘Aryan side’ in Budapest was within many ghetto buildings, being found just along the corridor or up the stairs. On paper, non-Jewish apartments within what were in practice mixed houses were out of bounds to Jews.⁶³ However, the policing of this was effectively an internal matter, depending in large part on the role played by the building’s caretaker (*házmester*) and those non-Jewish neighbors who had decided to remain in their apartments. Even if on paper and no doubt in at least some apartment buildings in practice non-Jewish apartments were not places that Jews could access, the shared public spaces of the staircase, internal balcony, courtyard and corridor were—potentially—sites of opportunity for exchange between Jews and non-Jews.

Indeed it would seem from survivor testimony that social networks between Jews and non-Jews within these mixed houses were vitally important during the summer and fall of 1944. This was hinted at by Randolph Braham, who noted that, ‘while some [non-Jews] took advantage of their privileged position, many were of great assistance to the persecuted Jews. They were especially helpful during the curfew by shopping or doing errands for the Jews, and by hiding or safekeeping their valuables.’⁶⁴ Given the late onset, swift timescale and surprising nature of ghettoization in Budapest, pre-existing social networks of Jews and non-Jews were of particular importance in the Hungarian capital. The result was that whether Jews were able to stay put because their apartment building was included in the list of ghetto buildings, or were forced to relocate was of crucial importance. Whether ghettoization meant dislocation or staying put mattered in all sorts of ways. Not only did staying put mean being able to hang on to your furniture, and avoid the trauma of forced relocations (although it is clear that both mattered).⁶⁵ Staying put also meant being able to maintain a local network of contacts both within and in the close vicinity of the apartment building.

Interviewing a survivor from Budapest, Judit Brody, I was struck by her response to what she saw as a rather naïve question about whether it mattered that the family was able to stay within their own apartment that was in a yellow star building.⁶⁶ In her words, staying put meant ‘everything.’ It was not so much the importance of remaining in a physical and material place (your own apartment with its furnishings and stored foodstuffs) but the significance

of remaining in a social place. Staying put meant that pre-existing social networks were more easily maintained, and in 1944 contacts were, in a sense, everything. For Brody, of particular importance were continuities of contact between her mother and market stall owners that had been built up over a number of years.⁶⁷ Those personal connections made shopping during the curfew for non-rationed goods far easier. But as her story showed, it was not just social networks in the immediate neighborhood outside the apartment building that were crucial, but also social networks within the apartment building. In Brody’s case, particularly important was a non-Jewish neighbor who remained living in his apartment next door. He was a man the family had history with, who ‘helped find someone who was willing, for payment of course, to take’ Judit to hide in the countryside.⁶⁸ Also important was the longstanding caretaker of their apartment building. In the summer of 1944 Judit adopted a new persona as Edit, the daughter of their non-Jewish caretaker. Reflecting on why it was her, rather than her sister three years older than herself, who was sent into hiding, Judit recalled that it may well have been because their caretaker’s daughter was ‘just a few months younger than me’ suggesting that he played a crucial role in Judit’s escape from the city.⁶⁹

As Judit’s story suggests, pre-existing non-Jewish contacts within the apartment building were of crucial importance during the summer and fall of 1944. In Judit’s case, it was non-Jewish contacts who meant that she traveled away from Budapest and spent the summer in the countryside outside of Debrecen. But non-Jewish contacts both inside and outside ghetto buildings could—and did—help Jewish families in other ways. Magda Kalman recalled that she ‘was the first who got these Swedish papers from Wallenberg in my building. And after the other people find it out, and everybody rush to Mr Barat [a non-Jew living in the building who had freedom of movement in the city] and asked him to get it, and they got.’⁷⁰ Judit’s family also got hold of papers Swedish papers in 1944, although in their case, it was not a non-Jewish neighbor who went to collect these but rather Judit’s father who left the apartment building without his yellow star.

As these examples make clear, the invisible walls that Alberto and I map out in the dispersed ghetto could be, and were, breached by Jews and non-Jews. These individual’s stories point to the limits of GIS analysis. While the model generated from the GIS — like any model — works in the general, it does not work in a particular: a particular that included Jews not only drawing upon social networks of

⁶³ Braham, *Politics of Genocide*, 737-8.

⁶⁴ Braham, *Politics of Genocide*, 853.

⁶⁵ Tim Cole, ‘Multiple and Changing Experiences of Ghettoization: Budapest, 1944’ in Eric Sterling (ed.), *Life in the Ghettos during the Holocaust* (Syracuse: Syracuse University Press, 2005) 150-1; RWPA F2C 8/309 Dénesné Simor; RWPA FC2 22/560, Anonymous 4 (JK).

⁶⁶ Interview with Judit Brody (26 November 2009).

⁶⁷ See also RWPA F2C 11/319, Jánosné Solmosi.

⁶⁸ Judit Brody, ‘Unpublished Memoir’; Correspondence with Judit Brody (11 June 2010).

⁶⁹ Correspondence with Judit Brody (28 November 2009).

⁷⁰ RWPA F2C 22/542, Magda Kalman.



non-Jews, but also risking it by heading out to the city outside of the curfew hours without wearing the yellow star.⁷¹ While mapping can show where Jews could physically walk to within the confines of the initial curfew, it cannot show us where Jews did go in the city. Moreover, our mapping tends to treat Jews as a homogenous group, rather than acknowledging the significance of differences such as gender and class in determining access to places and people in the city in 1944. To give just one example, the importance of gender was signaled by survivors who tended to assume that it was easier for women to leave their Jewish houses without the yellow star for more than the three hour window, given that men were marked out by circumcision, and feared the so-called ‘trouser test’ if caught on the streets outside of the curfew hours.⁷²

Models are generalizations. They describe a potential reality rather than an actual reality. However my sense is that taken together, models and other sources complement each other in promising ways. Qualitative and quantitative approaches and kinds of evidence have the potential to enrich each other and generate new research questions. Uncovering the extent of the invisible walls within this dispersed ghetto through spatial analysis has forced me to re-read survivor’s testimony in the context of the spatial patterns suggested by the model. It has triggered an attentiveness to the ways in which dispersed ghettoization in Budapest separated out Jews from other Jews, and increased the importance of Jewish-non-Jewish relations within the social space of ghetto apartment buildings. Moreover the context provided by mapping, helps to better understand the significance and importance of Jewish and non-Jewish attempts to breach the limitations of physical distance from resources in a divided city. Rather than quantitative and qualitative methodologies being opposed, they have the potential for meaningful exchange, with historical GIS a potential central element of the research process post the so-called ‘spatial turn’ in the ‘digital humanities.’ There may be value, not only as Friedman and Robinson argued to reading ghetto maps as texts, but also to mapping out ghettoization in Hungary to better understand both the motivations of Hungarian policy makers and the experiences of ordinary Jewish and non-Jewish Hungarians during 1944.

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⁷¹ Brody, Unpublished Memoir; Palosuo, *Yellow Stars and Trouser Inspections*, 151-3.

⁷² Palosuo, *Yellow Stars and Trouser Inspections*, 151-3; RWPA F2C 20/508, Ivan E. Becker; RWPA F2C 22/555, Andrew Stevens.