## HIVATKOZÁSOK:

Andorka Rudolf (2006): Bevezetés a szociológiába. Budapest, Osiris Kiadó Kalmán Zsófia – Könczei György (2002): A Taigetosztól az esélvegyenlőségig. Budapest, Osiris Kiadó Kováts András – Tausz Katalin (szerk.), (1997): Gyorsjelentés a fogyatékos emberek helvzetéről. Budapest, Szocjális Szakmai Szövetség Segítsünk közösen! Fogyatékossággal élő hallgatók a felsőoktatásban. Tájékoztató kiadvány.(2006), Budapest, Oktatási Minisztérium rop.kszk.gov.hu/portal/server.pt?space=Dir&cached=true&parentname=CommunityPage&par entid=0&in hi userid=711&control=OpenSubFolder&subfolderID=508 http://rop.kszk.gov.hu/portal/server.pt?space=Dir&spaceID=1&parentname=CommunityPage &parentid=0&in hi userid=711&control=OpenSubFolder&subfolderID=762&DirMode=1 www.wikipedia.org/wiki/Diszkrimin%C3%A1ci%C3%B3 http://demoszthenesz.hu/cikkek/1998eviXXVItorveny www.oki.hu/oldal.php?tipus=cikk&kod=2002-04-be-foldes-egveni http://www.szmm.gov.hu/main.php?folderID=16291&articleID=31422&ctag=articlelist&iid=1 10/2006. (II.16.) OGY határozat az Új Országos Fogyatékosügyi Programról.

## Nagy, Péter Tibor DSc

Eötvös Loránd University, Faculty of Social Sciences Center for Education and Youth Research/ Wesley College/ National Educational Library and Museum Educated elites and the Transsylvanian university (1872-1918)

The<sup>20</sup> social background and recruitment of university students and graduates is a recurring theme of social history and educational sociology.<sup>21</sup> In Hungary, university education was traditionally concentrated in Budapest, and this was true even after the establishment, in 1870s, of a new university in Kolozsvár/Cluj/Klausenburg, Transylvania's principal city.

The Transylvanian university was not just smaller and newer than the university in Budapest. It differed also in terms of its structure and the content of its courses. The most important feature distinguishing Kolozsvár University from most other traditional universities in Europe, including the University of Budapest, was the presence of a separate Faculty of Science. Moreover, unlike University of Budapest – which had Jesuit roots – Kolozsvár University was originally non-sectarian. If we accept that the University of Budapest favoured Catholics when recruiting its students, we may logically conclude that the non-sectarian character of Kolozsvár inevitably resulted in a significant over-representation of Protestant students.

<sup>&</sup>lt;sup>20</sup> See two paralell studies: Peter Tibor Nagy: The University of Kolozsvár/Cluj and the Students of the Humanities and Science faculties (1872-1918) In: Intelectualii si societatea moderna. Repere central-europene. Szerk: Cornel Sigmirean. Targu-mures, 2007.Editura Universitatii "Petru maior" pp.339-370, and Peter Tibor Nagy: The problem of the Confessional Recruitment of the Students at the Faculties of the Humanities and Science of the Transylvanian University. In: Historical Social Research Vol 33. (2008) 2 No. 124.

<sup>&</sup>lt;sup>21</sup> Regarding Hungary, the first works on the social background of students were published between the two world wars by József Asztalos and Dezső Laky. The well known works of French and American sociologist have been translated, and interpreted in the 1960s concerning the students of the 1960s, 1970s etc. For an early sociological *historical* analysis see Rudolf Andorka (1979), "Az egyetemi és főiskolai hallgatók társadalmi összetétele, 1898-1942" [Social Composition of University and College Students], *Statisztikai Szemle*, 2, 176-197. The last twenty years the most important socio-historical analysis have been written by Victor Karady, see footnotes: 2, 18.

Our analysis of Kolozsvár University's social composition focuses upon the Faculty of Humanities and the Faculty of Science. (A monograph on the Faculty of Medicine was published recently by Karády and Nastasa.<sup>22</sup>) It would seem justified to analyse the two faculties in combination. There are three reasons for this: first, students of the two faculties did not automatically receive doctorates on graduation – unlike students of the Law and Medical Faculties; second, graduates of the two faculties were more likely to find employment in the educational, cultural and scientific fields rather than on market or in public administration; third, the public's perception of universities of this type was determined in Hungary by the fact that in Budapest, where most of the country's students were educated, there was no separate Faculty of Science, since science courses were taught within the Faculty of Humanities. <sup>23</sup>(Nevertheless, a distinction was made even in Budapest: namely, undergraduate *science* courses were open to *reáliskola* [similar to German type realschule, a grammar school with French and sciences, but without Latin and Greek] graduates as well as to *gimnázium* [classical grammar school] graduates.)

Our inquiry into the social composition of students at the two faculties was made possible by a series of research projects<sup>24</sup> that offered us – inter alia – a prosopography of all students graduating from Kolozsvár University between 1850 and 1918. At the outset of our inquiry, we received a file containing the prosopography of students at the Humanities and Science Faculties, compiled for publication by Lucian Nastasa, to whom we express our gratitude. We subsequently assimilated the file into a coded database. Thus the database used in this paper embraces all humanities and science graduates of Kolozsvár University for the period under discussion.

## Methods of revealing the social composition of university graduates

The social composition of the group could be gleaned by employing several important variables, including classic sociological background variables<sup>25</sup> as well as other variables

<sup>&</sup>lt;sup>22</sup> Karady-Nastase, The University of Kolozsvár/Cluj and the Students of the Medical Faculty, Budapest and Cluj, 2004.

<sup>&</sup>lt;sup>23</sup> For instance, in 1892/93, 80 students were at the Faculty of Humanities and 40 students at the Faculty of Science in Kolozsvár, while Budapest University's Faculty of Humanities had 373 students. (MSÉ, 1894, 294). In the academic year 1901-02, Kolozsvár granted 33 degrees in humanities subjects and 11 in science subjects, while Budapest granted 65 in humanities subjects and 38 in science subjects. Further, 16 doctoral examinations were held in Kolozsvár and 43 in Budapest (MSÉ, 1903, 380). These statistics demonstrate that Budapest dominated two-thirds of this sector of higher education.

<sup>&</sup>lt;sup>24</sup> The current research project comprises the continued elaboration and in-depth analysis of databases established by Viktor Karady in the 1970s and by me in the 1990s. It represents the combination of the resources of the Hungarian Scientific Research Fund (OTKA), the National Social Research Foundation (OKTK), Pécs University, the Central European University (CEU), and the Hungarian National Research and Development Programme (NKFP), as well as various previous research projects conducted by Viktor Karady and by myself, under the auspices of the CEU, the John Wesley Theological College (WJLF), the Institute of Higher Education Research (HIER) and Pécs University.

 $<sup>^{25}</sup>$  1. The ethnic character of a student's name based on his surname, providing ethnic data at least in respect of the student's parents or grandparents. A clear distinction can be made between names of Slav, German or Romanian origin. (Karády Viktor-Kozma István: Név és nemzet, Osiris, Budapest, 2002). A less clear distinction can be made between noble and non-noble surnames. Iván Nagy's complete list of noble families (Magyarország családai czímerekkel és nemzékrendi táblákkal. 1–7. kötet. (n. 8-r.) Pest, 1857–60) provides data on the most common spellings and meanings of noble surnames. 2. The character (ethnic character, rare etc) of a student's first name. 3. Students' name changes, which – if they concern changes from non-Hungarian names to Hungarian names – are an important indicator of assimilation and, as such, allow us to futher refine the ethnic image. 4. Data indicating that a student has baronial or other aristocratic status. 5. The student's place of birth, classifiable partly in terms of municipality, partly in terms of county, and partly in terms of region. 6. A student's year of birth, which enables us to sketch the differing characteristics of the various generations. 7. The

relating to graduates' pre-university education.<sup>26</sup> This second group of variables provided no information about the social background of students, but they did give us important signals concerning their development at university.<sup>27</sup>

Since we were in possession of a full name database, we were also able to reveal certain relationships within the database. For instance, we could identify siblings, possible cousins, and father-son relationships.

In the course of the research project, we also examined how Kolozsvár University's humanities and science graduates reached elite positions. We did so by linking our group of graduates with another database that had already been compiled in the course of research on Hungary's social elite. According to our supposition made during research on the elite, large representative encyclopedias express the value judgements of people in the various eras concerning the importance of certain individuals.<sup>28</sup> The "success" of such encyclopedias

<sup>27</sup> 19. Choice of first university, compared with regional findings in points 5,13,15. 20. Year of enrollment in first university, which when compared with point 17 informs about the reasons for leaving out a year. 21. The number of semesters spent at Kolozsvár University.

22. Date of graduation, which when compared with point 20 documents whether a student was slow or quick to complete university. 23. Topic of doctoral dissertation – which is the best indicator of objective interests and a good indicator of choice of career. 24. Date of doctoral dissertation, compared with points 20 and 22. 25. The result of the doctoral dissertation. 26. Presence of scholarship. 27. The public or religious affiliation of the body granting the scholarship, in relation to the professional and religious background of the student's family, whether or not a father or keeper is present, the inferred success of study, and points 9, 12, 14, 22, 23 and 25 in relation to the various topics. 28. The amount of the scholarship, naturally in relation to the time axis (see point 20). 29. The timing of the scholarship. 30. Time spent and qualifications received at other institutions. 31. Study abroad – in combination with the character of name and the native language, or – religious denomination in combination with the type of settlement of the receiving institution. 32. Theological and other studies in relation to religious affiliation and father's profession.

<sup>28</sup> A different logic was applied in the valuable historial elite research carried out in Hungary by, inter alia, Tibor Hajdú, György Lengyel, Tibor Huszár, Miklós Hadas, Jenő Gergely, I. Gábor Kovács, Katalin S. Nagy, and Sándor Szakály, all of whom defined the criteria of becoming part of the elite by profession/trade and by economic sector. Numerous arguments can be made for both methods. The definition by profession/trade filters out the possible arbitariness of decisions made by encyclopedia editors and possible systematic distortions, but it gives perhaps excessive significance to group preferences stemming from contemporaries' relationships and possible personal frictions. If, for instance, we wish to define the scientific elite as the group comprising "members of the Hungarian Academy of Sciences" and "university professors", important personalities (e.g. radical sociologists) will be excluded, while figures of minor lasting significance will be included. If research on occupational groups is the point of departure, then it is probably possible to find the informal bodies (for instance, in the case of the radicals mentioned above, the Vörösmarty Academy) which compensate for the decisions of the contemporary official bodies. (In subsequent analyses, we shall employ this means of

month and date of birth of a student, which enables us to distinguish between people with common surnames. 8. A student's native language, particularly in combination with the ethnic indicators in 1, 2 and 3 – data on native language is a particularly valuable aspect of the records kept in Kolozsvár and is rarely found at other such institutions. 9. A student's religion. 10. Character of name of the student's parent or keeper – with particular regard to the findings of points 1, 2, 3 and 8. 11. Whether or not the student's parent or keeper holds a doctorate – as an indicator of someone belonging to the social elite. 12. Profession of the student's parent or keeper, which gives an impression of the social stratification of groups without doctorates and mostly without a university education. 13. Place of residence of the student's parent or keeper, which should be compared with the regional findings made in point 5. 14. Difference (if any) between the student's parent and his keeper, as well as the social status of deceased fathers.

 $<sup>^{26}</sup>$  15. Place where the student graduated from secondary school, in relation to the regional data in points 5 and 13. 16. Maintainer of secondary school, in relation to point 9 – that is, whether or not the student chose a school reflecting his religious affiliation, which is a good measure of the extent of the family's secularisation. 17. When the student received his high school diploma, which when compared with point 6 provides an insight into the system of social relations governing the loss of years at school. 18. The type of secondary school, which indicates the student's commitment to a humanities-based or science-based education.

among the middle classes more or less proves that the selection criteria used by their editorial boards do exhaust, in many respects, the criteria of "being known" and "to be known" – despite the odd case of "unfairness" and the unjustified portrayal of personalities whose significance was not great in historical terms.

Many excellent Hungarian encyclopedias were published in the first two-thirds of the nineteenth century, but we excluded them as sources for our research, because they do not cover the generations that oversaw Hungary's modernisation in the latter third of the century – still less individuals graduating from Kolozsvár University after 1870.

The earliest encyclopedia that might possibly have assisted us in our research was the *Magyar Lexikon* [Hungarian Encyclopedia], which was published in the first half of the 1880s.<sup>29</sup> We decided, however, to discount this work, since contemporaries heavily criticised it, raising doubts in our minds about the representativity of the positions and tastes reflected in its choice of headwords.

A monumental volume published in the 1890s was the *Pallas Nagylexikon* [Great Pallas Encyclopedia],<sup>30</sup> which many people still regard as Hungary's best encyclopedia. By means of two "input" and three "output" factors, we could show that this encyclopedia represented the positions and tastes of the contemporary elite and that it reflected relevant knowledge. Input factors included the unprecedented contribution made by academics and scientists to the work of the encyclopedia's editorial board, the enormous sum of money spent on the edition, and the sheer number of volumes (16) comprising the encyclopedia. Output factors – signs of the encyclopedia's social acceptance – were the sale of 22,000 copies, strong market demand for the *Pallas* in 1916-18 when the newer great encyclopedia was out of print, and the fact that the *Pallas* was the first encyclopedia in Hungary to be published in digital form in the 1990s.

The next group, the elite at the turn of the century, was documented by the *Révai Nagylexikon* [Great Révai Encyclopedia].<sup>31</sup>

Supplementary volumes of the Great Révai Encyclopedia, published in the 1920s and 1930s, contained information about members of the elite in the 1910s. And they also presented the careers of an elite that was divided into many parts by the Treaty of Trianon.<sup>32</sup> The "input" in this case was the complete copyrighted material of the *Pallas*, the full capacity of one of the largest Hungarian book publishers, and the contribution of the academic elite – which paralled its earlier contribution to the *Pallas*. The "output" elements – the signs of social acceptance – were as follows: the great number of subscribers – the *Révai* had 26,000 subscribers prior to the First World War; the satisfaction of subscribers – as shown by the fact that when the publisher offered to buy back all copies sold to its 26,000 subscribers, fearing that it would be

establishing a complete elite.) If, however, the whole of the "known elite" is the target group, this does not seem to be a viable method. A further advantage of the "encyclopedia" elite selection is that it renders the elites of the various sectors intermeasurable.

<sup>&</sup>lt;sup>29</sup> The *Magyar Lexikon* was published in 12 volumes between 1879 and 1882 by Frigyes Rautmann (publisher) and Ede Somogyi (editor).

<sup>&</sup>lt;sup>30</sup> The Pallas Nagylexikon was published in 16 volumes between 1893 and 1897 by Pallas Irodalmi és Nyomdai Rt. which had been founded by Lajos Gerõ in 1884. Its volumes were significantly larger than the volumes of the Magyar Lexikon.

<sup>&</sup>lt;sup>31</sup> The 20 volumes of the *Révai Nagylexikon*, containing in total 17,000 pages and 113 million characters, was published between 1910 and 1926. Fourteen volumes had been published by May 1916. Volumes 15-19 were published after the First World War.

<sup>&</sup>lt;sup>32</sup> Volume 20 (a supplementary volume published in 1927) contained 940 pages (including several pages linked with the end of volume 19). The supplementary volume published in 1935 contained 856 pages.

unable to finish the series, just 150 subscribers took up its offer; the enduring reputation of the Révai – it retained its position as Hungary's "official" encyclopedia until 1948, despite the publication of various complete encyclopedias between the two world wars, such as the *Tolnai*, the *Dante*, the *Gutemberg*, and above all the *Új Idők Lexikona* [New Times Encyclopedia], which even covered the initial years of the Second World War. Moreover, when the *Új Magyar Lexikon* [New Hungarian Encyclopedia] was published in the early 1960s (based on academic research carried out in the 1950s), it was soon regarded as excessively dogmatic even in Marxist circles, and so the *Révai* continued to be the main reference encyclopedia of Hungary's middle classes until the 1990s. The *Révai* was republished during the boom in reprints of 1989-90, and it has existed in digital form since the 1990s. The first encyclopedia series published after Hungary's political changes of 1989-90 was called the *Révai Új Lexikona* [New Révai Encyclopedia] – this in itself contributed to the prestige of the series.

In addition to the general encyclopedias, two specialist encyclopedias were used as sources in our research on members of the elite: the two-volume *Keresztény Magyar Közéleti Almanach* [Christian Hungarian Almanac of Public Life], which was published in 1939 and serves, as an encyclopedia of public figures,<sup>33</sup> as a primary source both for the period between the two world wars and for the decade prior to 1918 – although it excludes a significant part of the elite because it was published in the same year as Hungary's second anti-Jewish law. The other specialist encyclopedia used by us as a source was the *Zsidó Lexikon* [Jewish Encyclopedia], which was published in 1929 and which provides a uniquely diverse collection of figures who were adherents of Judaism and who remained active in public life during the period of anti-Semitic discrimination. This material is also an important source for the Dual Monarchy era.<sup>34</sup>

Of course, one should not ignore individuals that have turned out to be figures of significance on the scales of history, even though they were left out of encyclopedias published at the time or subsequently. We assigned the "scales of history" role to the *Magyar Életrajzi Lexikon* [Hungarian Biographical Encyclopedia],<sup>35</sup> which was probably the most objective encyclopedia published during the 1956-1989 period, as well as to supplementary volumes published under similar titles after the political changes of 1989-90.

An inevitable weakness of volumes in the Hungarian Biographical Encyclopedia series is that they exclude graduates with careers in Romania or possibly Serbia, unless they become active in Hungarian minority affairs in those countries. A further weakness is that one of the selection criteria of the Hungarian Biographical Encyclopedia is that a person should be deceased. Thus, there is a theoretical risk of somebody being born in 1895, graduating from Kolozsvár University in 1917-1918 (the final year in our database), failing to make a career by the mid-1930s, subsequently reaching an elite position in society, still being alive in 1991, and thus not being included in the Hungarian Biographical Encyclopedia. (Below, we attempt to correct this weakness by assimilating in those graduates born before 1918 and listed in the new Magyar Nagylexikon (Hungarian Great Encyclopedia) (apr 19000 pages) published in the 1990s and the early 2000s – a volume which contains people who are still alive today and

<sup>&</sup>lt;sup>33</sup> Small contemporary encyclopedias were published from the 1920s onwards, such as *Ki kicsoda* [Who's Who] and *Magyar Társadalom Lexikonja* [Encyclopedia of Hungarian Society]. A separate volume of Christian Hungarian Almanac of Public Life was published on contemporary Hungarians living abroad.

<sup>&</sup>lt;sup>34</sup> The encyclopedia, edited by Péter Újvári, was published as a reprint edition in the 1990s. Its digital publication was attempted by me in the 2000s.

<sup>&</sup>lt;sup>35</sup> The two-volume biographical encyclopedia, which covered the period until the late 1960s, was followed 10 years later by a further volume, which contained the whole work and was 50 per cent larger. At the time of the political changes of 1989-90, a further volume of similar size was published. Thus, the encyclopedia comprises in total about 3500 pages.

which supplements the data of the Hungarian Biographical Encyclopedia with value judgements and relative judgements made by historians at the turn of the millennium). The other distorting influence of the Hungarian Biographical Encyclopedia is that it places a disproportionate emphasis – more than is justified by their "true" historical and social weight – on activists in the workers' movement. In particular, it focuses on just several hundred communist party activists – although in view of the communist party's social composition, this has little bearing on our task of selecting an elite from among graduates of Kolozsvár University.

We chose not to supplement our group by adding in all those individuals included in the Gulyás and Szinnyei encyclopedias,<sup>36</sup> but we did make use of information available in these encyclopedias for our selected individuals.

Indeed, we could use such secondary sources to obtain further information on how graduates of Kolozsvár University advanced into elite positions (e.g. their employment, foreign study tours, doctoral titles, the time of death, number of publications, etc.).

In the scope of this paper, we were able to realise just part of this multifaceted "programme".

## "Chapter 9" of the analysis to be compiled: the religious composition of graduates

In terms of religious affiliation, the 4000 individuals graduating from Kolozsvár University's Faculties of Humanities and Science over the almost 50-year period may be divided up as follows: one-third = Roman Catholic; one-third = Calvinist Protestant, one-eighth = Lutheran Protestant, the remainder = affiliated with the small Unitarian Protestant and Jewish denominations. Members of Eastern churches (Greek Catholic and Greek Orthodox) were also present in small numbers.

Table 1: Religious affiliation of graduates of the Faculties of Humanities and Science, Kolozsvár University

	N	Percentage
No data	127	3.2
Roman Catholic	1354	34.0
Greek Catholic	167	4.2
Calvinist	1375	34.5
Lutheran	517	13.0
Unitarian	257	6.4
Greek Orthodox	72	1.8
Jewish	104	2.6
Islam	1	0.0
Armenian Catholic	12	0.3
	3986	100.0

An immediate observation is that the Faculties of Humanities and Science in Kolozsvár were dominated, but only *jointly*, by Hungary's two largest denominations, which were traditional

<sup>&</sup>lt;sup>36</sup> The series edited by József Szinnyei and entitled *A magyar irók élete és munkái* [The Life and Works of Hungarian Writers] contains theoretically the biographies of all Hungarian writers. The initial volumes covered the period until 1900, while subsequent volumes covered the period up until the First World War. The first volumes of Gulyas's similarly entitled encylopedia continued the work and supplemented it with personalities that had appeared in the meantime until the end of the 1930s. Later volumes, which remained in manuscript until their gradual republication in recent years, covered a period that went well beyond the late 1930s. Since both encyclopedias aimed for completeness, neither of them should be considered authoritative in terms of elite *selection*, although we may, of course, use their data.

rivals in terms of the country's national self-definition. (Catholic definition: Hungary is the country of Maria, "defensor fide", Calvinist definition: Calvinism is the Hungarian religion, religion of Hungarian independency against Habsburg Catholicism) Thus, Kolozsvár University had no single dominant religious group - unlike Budapest University, where almost 50 per cent of students were Roman Catholic. A further observation is that Kolozsvár University lacked the large absolute number and percentage of Jewish students (as many as one-quarter of all students at the turn of the century) which characterised Budapest University. Even if we suppose – and this is demonstrated by the proportion of students training to be teachers<sup>37</sup> – that Jewish students tended to proceed to freelance careers in the humanities rather than to secondary school teaching (which was quite logical, since most secondary schools were maintained by religious denominations rather than by public bodies, and such denominational maintainers of schools did not employ individuals affiliated with other denominations or religions - for instance, the monastic orders - or openly gave preference to co-religionists), the share of Jewish students at Kolozsvár University was remarkably low, when compared with the ratio at Budapest University. In view of the particular social role of Jews in Hungary and the advent of groups in society - mainly Catholic – opposed to Jewish assimilation and emancipation, Budapest University was – at least in the eyes of these anti-Semitic groups and despite the fact that Jews comprised a mere minority of students - a "Jewish stronghold". But this could not be said of Kolozsvár.

Evidently, in order to properly understand the relative positions of the various denominations among the student population, we need to calculate some ratios, which will demonstrate whether *in relation to a given denomination's share of the general population, its share of students was high or low.*<sup>38</sup> If we were to calculate student participation and religious affiliation for the whole recruitment area, we would obviously come up with nonsensical figures, since Kolozsvár lies at a great distance from the most uniformly Catholic area in Hungary, Western Upper Hungary, and from predominantly Catholic Transdanubia. Both regions lie far closer to Budapest; obviously, students from such areas were less numerous in Kolozsvár than students from eastern parts of Hungary. But even some areas of Hungary to the east of the River Tisza lay closer to Budapest than to Kolozsvár.

<sup>&</sup>lt;sup>37</sup> At the turn of the century, Jewish students accounted for 24.7 per cent of the 1349 humanities students at Budapest University and they received 11 per cent of the 109 teaching diplomas issued by the university. (MSÉ, 1905, 391, 397)

<sup>&</sup>lt;sup>38</sup> For the methodology used, see various studies by Viktor Karády, including "Jewish Over-Schooling Revisited': the Case of Hungarian Secondary Education in the Old Regime (1900-1941)", Yearbook of the Jewish Studies Programme, 1998/1999, Budapest, Central European University, 2000, 75-91; "Magyar kultúrfölény vagy etnokrata önámítás" [Hungarian Cultural Superiority or Ethnocratic Self-Deception], Educatio, 2000, 252-265; "Felekezeti szegregáció a magyar gimnáziumi piacon (1867-1944)" [Religious Segregation in the Hungarian Grammar School Sector], in Nagy, P. T. (ed.), Oktatáspolitika és vallásszabadság. *Állam-egyház-iskola-társadalom a 20<sup>e</sup> században*, Budapest, Új Mandátum, 2000, 209-232; "'Magyar kultúrfölény vagy iskolázási deficit'? Újabb adatok a honi középiskolások dualizmuskori nemzetiségi összetételéről (1882-1915)" ['Hungarian Cultural Superiority or Educational Deficit'? New Data on the Ethnic Composition of Secondary Schools in the Period of the Dual Monarchy (1882-1915)], in Korall (Budapest), 3-4, 2001,129-144; "Szegregáció, asszimiláció és disszimiláció. Felekezetek az elemi iskolai piacon (1867-1942)" [Segregation, Assimilation and Dissimilation. Religious Denominations in the Elementary School Sector (1867-1942)], in Világosság, 2002, XLIII/8-9, 61-83; "A kolozsvári egyetem medikusai a magyar orvosi piacon (1872-1918)" [Students of the Medical Faculty of Kolozsvár University in the Hungarian Medical Sector], Educatio, (Budapest), 2002/2, 237-252; ("Graduates") Viktor Karády and Lucian Nastasa, The University of Kolozsvár/Cluj/Cluj and the Students of the Medical Faculty (1872-1918), Cluj, Ethnocultural Diversity Resource Center, Budapest and New York, CEU Press, 2004, 370. Viktor Karády and Péter Tibor Nagy, Educational Inequalities and Denominations. Database for Western Slovakia, 1910, Budapest, Wesley János Lelkészképző Főiskola, 2004.

Accordingly, our principal means of estimating the under- or over-representation of religious denominations was to examine the religious composition of graduates *from Transylvania only* (almost 60 per cent of graduates). (The indicator we used to create this group was the location of the secondary school formerly attended by a student – rather than the place of birth, in view of the effects of regional mobility. Where such data was lacking, an individual was placed in the group if the parent or guardian was Transylvanian. Based on these two categories, 2233 graduates were placed in the group. We then integrated into the group 102 individuals for whom we had no data on the location of their former school or the place of residence of their parent or guardian, but who had been born in Transylvania.)

Table 2: Religious affiliation of Transylvanian graduates of the Humanities and Science Faculties, Kolozsvár University

		Ν	percentage
No data		31	1.3
Roman Catholic		600	25.7
Greek Catholic		105	4.5
Calvinist		929	39.8
Lutheran		325	13.9
Unitarian		236	10.1
Greek Orthodox		52	2.2
Jewish		46	2.0
Armenian Catholic		11	0.5
	Total	2335	100.0

To be able to compare these figures with data on religious affiliation in Transylvania, we need to note that Greek Catholics and Greek Orthodox comprised similar percentages (28-29 per cent) of the total population and that Romanian was the native language of 90 per cent of people in these two groups. Similarly, Roman Catholics and Calvinists comprised similar percentages (14-15 per cent) of the total population and Hungarian was the native language of 90 per cent of people in these two groups. There was a small Unitarian population (2.5 per cent) whose native language was almost exclusively Hungarian. The Lutheran population (8.3 per cent) almost universally spoke German. The ethnic classification of the Jewish population (2.3 per cent) was more complex, as three-quarters spoke Hungarian as their native language and one-quarter German.

Concerning the mainly Hungarian denominations, Unitarians were four times overrepresented among graduates, Calvinists were 2.7 times over-represented, and Catholics were 1.8 times over-represented. In national surveys, Calvinists and Roman Catholics tended to be under-represented, but it seems this was counter-balanced in Transylvania by the urban nature of the ethnic Hungarian population. Still, the difference between the Calvinist and Catholic populations requires explanation.

The Lutherans were over-represented by a factor of 1.7. Most members of this group were Transylvanian Saxons living in German-speaking towns. This accounts for their over-representation – given the high level of urbanisation in their community. But we must still explain why the Lutherans' representation is less than that of the Catholic-Calvinist Hungarian population.

An over-representation of Jewish students, which applied to both Budapest University and the country as a whole (on account of the sheer number of students attending Budapest University), could not be observed at Kolozsvár University. Indeed, Jewish graduates were under-represented by a factor of 0.9. This requires explanation below.

The representation indices for the Greek Catholic population (0.16) and the Greek Orthodox population (0.07) effectively demonstrate that Romanians had little chance of graduating from the Humanities and Science Faculties of Kolozsvár University.

These raw representation data reflect enormous differences. For instance, a Unitarian Transylvanian was *fifty times* more likely than a Greek Orthodox Transylvanian to graduate from university in Transylvania. But the raw representation data should be refined in various respects.

### The time axis

One method of refining the data is to examine the percentages among the various cohorts, that is, whether the discrepancies are increasing or decreasing? If we form groups of graduates based on the year of birth, then the share of Roman Catholics steadily declines, from fourfifths of those born around 1850 to just one-fifth of those born around 1890. However, in the final cohort group, the share of Roman Catholics begins to rise once again. Calvinists account for less than one-third of graduates at the outset, but more than two-fifths by the end of the period. Thus, these two large Hungarian-speaking groups gradually swapped places. Not only did a greater share of Calvinists graduate from the Humanities and Science Faculties, but also they did so at an increasing rate.

The Greek Catholic ratio fluctuated with a tendency to decline, while the proportion of Greek Orthodox stayed the same. As among Hungarian speakers, so the share of Catholics declined among Romanian speakers. The Lutherans' participation rate increased temporarily and then declined. The Jewish rate rose substantially. Those born in the first three-quarters of the nineteenth century are almost completely absent from the group of graduates, but the cohort born around 1880 approaches the participation rate exhibited by the general population, while those born in the following decade are over-represented and those born in the final decade are strongly over-represented.

Cohort	No	Rom.	Greek	Calv.	Luth.	Unit.	Greek	Jewis	Arm	Total	%
	data	Cath.	Cath.				Orth.	h	Cath.		
1836/45	_	63.6		27.3		9.1				11	0.5
1846/55	0.7	41.4	7.9	30.0	3.6	15.0		1.4		140	6.4
1856/65		32.7	6.8	35.0	11.7	10.5	2.3		1.1	266	12.2
1866/75	1.4	27.0	5.9	34.2	18.5	9.0	2.7	0.9	0.5	222	10.2
1876/85	0.5	23.0	2.7	45.4	15.3	8.5	2.2	1.9	0.5	634	29.1
1886/95	0.4	20.5	4.0	42.6	14.4	12.5	2.5	2.8	0.3	721	33.1
1896 -		31.0	2.2	42.9	8.7	7.6	2.2	4.3	1.1	184	8.4
N	10	563	92	888	294	228	48	44	11	2178	100
Total	0.5	25.8	4.2	40.8	13.5	10.5	2.2	2.0	0.5	100.0	

Table 3: Religious affiliation of Transylvanian graduates of the Humanities and Science Faculties, Kolozsvár University, by cohort

The time axis demonstrates, therefore, that Catholics – both Roman and Greek – reduced their participation over time, perhaps turning away from Transylvania towards Budapest. As a result, Kolozsvár University became increasingly Calvinist. Transylvanian Jews underwent the most rapid process of modernisation, progressing from almost total exclusion to over-representation. The reason for Jewish under-representation – as revealed by our initial survey – was quite simply that Transylvanian Jews lagged behind Hungary's urban Neolog Jewish communities. Indeed, it was only at the turn of the century that they began to catch up. If the

First World War and the Paris Peace Settlement had not brought an end to the relative liberalism of the Austro-Hungarian Empire, the intellectual advance of Transylvanian Jewry would doubtless have continued.

## Percentage of parental cohort with a school education

A second method of refining the data is to compare the ratios with a cohort of the population that has some education, as a potential parental cohort, rather than with the raw data for religious affiliation. Assuming a minimal mobility rate, if the religious denominations' graduate ratios resemble the parental cohorts' ratios of university graduates or secondary school graduates, then it would be false to cite religious affiliation as a cause of underrepresentation or over-representation. Instead we would say that such ratios merely express existing inequalities. Educational mobility is significant where a child of a parent with four grades of secondary education or less, graduates from university. By examining the religious affiliation of the cohort of parents with less than four grades of secondary education, we can establish the broadest range of the emission agent.

The census of 1910 was the only census to record, in detail, the level of education of respondents. The cohort data were not published at the time, but they are – or will soon be – available to us, thanks to a source publication series.<sup>39</sup> Such data show that, in 1910, approximately 30 per cent of secondary school graduates aged  $40-50^{40}$  were Roman Catholic. Similarly, 31 per cent of university students born around 1900 – evidently, children of those in the first group – were Roman Catholic. In contrast, while Calvinists accounted for 20-22 per cent of secondary school graduates in the parental cohort, they comprised almost twice that percentage among recent university graduates. *This supports our previous conclusions concerning the increasingly Calvinist character of Kolozsvár University*.

One in 10 secondary school graduates in the parental cohort was Greek Catholic and one in ten was Greek Orthodox. *Relatively speaking, very few Greek Catholics or Greek Orthodox were students at the Humanities Faculty.* Evidently, many young Greek Catholics and Greek Orthodox with an interest in humanities trained as priests rather than attending university – particularly because many of their fathers were employed in the ecclesiastical sector.

Among Calvinists and Roman Catholics, those with eight grades of secondary education and those with *just* four grades comprised roughly equal percentages, that is both religious denominations had lower middle classes in educational terms. On the other hand, among Greek Catholics and Greek Orthodox, those with eight grades of secondary education were more than twice as numerous as those with just four grades.<sup>41</sup> We may conclude that most Greek Catholics and Greek Orthodox – if they received any education at all – were trained as

<sup>&</sup>lt;sup>39</sup> Viktor Karády and Péter Tibor Nagy, Educational Inequalities and Denominations, Data base for Transylvania, 1910, Budapest, Wesley János Lelkészképző Főiskola, to be published in 2010.

<sup>&</sup>lt;sup>40</sup> The census even classified pupils without a high school diploma in the category of those with eight grades of secondary education. As far as seminary graduates were concerned, this was a significant factor, since there were, in total, more than 2000 Greek Catholic/Greek Orthodox elementary school teachers, priests and assistant priests.

<sup>&</sup>lt;sup>41</sup> The census placed pupils who had attended so-called minor grammar schools [kisgimnáziumok] (institutions with just four grades) in the category of those with four grades of secondary educaton. It did the same with those pupils of so-called major grammar schools [főgimnáziumok] or major realschools [főreáliskolák] who broke off their studies in the fourth or fifth grade, and with pupils who completed four (or possibly five or six) grades of civil school [polgári iskola, German type Bürgerschule]. In 1904–1905, there were 32 grammar schools, 6 realschools, and 45 civil schools in Transylvania.(MSÉ, 1905, 328)

priests or primary school teachers. Thus, among both these groups, the lower middle class group (in educational terms) was relatively small.

In terms of the relative percentages of those with eight grades of secondary education and those with just four grades, the Jewish population was at the other end of the scale. Jews with eight grades of secondary education were slightly less numerous than those with just four grades. Thus, it is among this group that the middle class is the broadest in educational terms. Despite the presence of a broad lower middle class and relatively broad upper middle class – which meant that, for a given cohort, 7 per cent of those with secondary school education were Jewish, the participation rate at the Humanities and Science Faculties reflects a significant under-representation.

	Aged 40-44	Aged 45-50
Roman Catholic	31.4	31.2
Greek Catholic	11.5	11.4
Calvinist	20.4	20
Lutheran	16	16.5
Greek Orthodox	9	9.2
Unitarian	3.6	4.5
Jewish	7.6	5.9
Other	0	0.3
Total	100	100
N	2106	1951

Table 4: Religious affiliation in Transylvania in the secondary-school-educated "parental" cohort, in 1910

### The level of education among the various denominations

The third method of refining the data is to consider how the "modernity" of a given religious denomination – independently of the cohort factor – influenced the likelihood of individuals obtaining a university education. Factors indicating "modernity" include urbanisation, literacy, employment in the non-farming sector, etc.

Firstly, we examined the data in terms of compliance with compulsory school attendance, as an indicator of modernity. <sup>42</sup> Data on compulsory school attendance (distorted by various

<sup>&</sup>lt;sup>42</sup> In the 1890s, the Greek Catholic and Greek Orthodox populations displayed the highest truancy rates for Transylvania as a whole: more than one in three children of compulsory school age did not attend school. In the course of the decade, the truancy rate fell slightly among the Greek Orthodox population but remained unchanged among the Greek Catholic population.

The fact that according to the statistics one in five Jewish children did not attend school may be explained by the high number of officially unrecognised schools and Transylvania's relatively large Orthodox population. In just five years, however, the share of Jewish children not attending school fell to 91 per cent of its previous level. Thus, the Jewish population showed the fastest improvement, alongside the Lutheran population. (Cf. Karády: 2000: pp. 223-)

The Calvinist and Unitarian populations had similar truancy rates, with one child in six failing to attend school. The rate showed a moderate improvement over the decade among both populations. (The high rate of completed secondary school education exhibited by the Unitarian population does not seem to draw up the lower groups...) Among Catholics – numerically by far the strongest religious denomination – just one in seven or eight children did not attend school: but the trend was downward.

The best figures are for the Lutheran population, which had the lowest truancy rate, with just one in nine children failing to attend school. Over the decade, the rate falls even further, to just one in eleven children. (Thus, the

complicated factors) were recorded as public administrative data, whereas data on literacy changes (possibly less distorted) were recorded as census data. One could write a complete monograph on the basis of such data, since they are available for several censuses and are broken down by settlement, ethnic group and religious denomination. Perhaps the best means of perceiving specific features of the various religious denominations is to examine the national figures as well as the figures for Transylvania.

1880	1890	1900	1010
	1070	1900	1910
395	492	570	638
91	135	199	277
512	584	642	686
566	648	698	735
131	189	269	355
362	482	557	632
571	482	557	632
	91 512 566 131 362	91 135   512 584   566 648   131 189   362 482	91 135 199   512 584 642   566 648 698   131 189 269   362 482 557   571 482 557

Table 5: National literacy rates by religious denomination, as recorded by the various censuses (rates per thousand)

(Hungarian Statistical Publications (hereinafter MSK):vol. 61: 602-, MSK: vol. 64: 174)

Table 6: Literacy rates in Transylvania by religious denomination, as recorded by the various censuses (rates per thousand)

	1880	1890	1900	1910
Roman Catholic	298	405	509	597
Greek Catholic	75	117	177	247
Calvinist	317	404	409	581
Lutheran	616	679	732	761
Greek Orthodox	108	153	227	311
Unitarian	360	473	544	617
Jewish	443	541	631	683
() (OIZ 1 (1 (00	MOIZ	1 ( 4	1 (7 4)	

(MSK: vol. 61: 602-, MSK: vol. 64: 174)

As the table clearly shows, compared with the situation in 1890, Transylvania's Greek Catholic and Greek Orthodox populations demonstrated the *most rapid* improvement – with their literacy rates increasing by factors of 3.3 and 2.9 respectively. However, if we examine the figures as percentages, we observe that the effects of school attendance on literacy were greatest among Roman Catholics and Calvinists (whose overall literacy rates increased by 30 percentage points and 26 percentage points respectively). There was a smaller percentage point increase among Greek Catholics and Greek Orthodox (17 and 20 per cent). That is to say, although the Greek Catholic and Greek Orthodox populations (93 and 96 per cent of which were ethnic Romanians and which together comprised about 58 per cent of Transylvania's total population) rapidly increased their literacy rates, nevertheless in terms of percentages they fell further behind the Roman Catholic and Calvinist populations (92 and 98 per cent of which were ethnic Hungarians and which together comprised about 29 per cent of Transylvania's total population).

effect of the community's traditional duality is limited: the low rates in the tiny Lutheran villages and the high rates in the Saxon towns do not completely cancel each other out.)

Nationwide, Catholics and Jews appeared to set off from, and arrive at, similar positions. But one should note that elderly Jews who were literate only in Hebrew were counted as illiterate by the census. Examining the various cohorts, we observe a significant difference between the Catholic and Jewish populations by 1910 – with a literacy rate of 891 per thousand among Catholics aged 20-29 and a literacy rate of 953 per thousand among Jews in the same age group. This is a significant difference. (MSK: vol. 64: 178) In Transylvania, the Jewish literacy rate exceeded the Roman Catholic and Calvinist rate of 40 per cent, as well as the 47 per cent rate of the Unitarian population. And it was still higher, even in 1910. Since threequarters of Jews spoke Hungarian, their high literacy rate enhanced the figure for the Hungarian-speaking population. By 1910, as many as 90 per cent of Transylvanian Jews residing in urban areas were native Hungarian speakers, and around 90 per cent of Jews in the Szekler region were Hungarian-speaking Jews. It was only in Beszterce Naszód County that German-speakers formed a majority of Jews.

Although the Unitarian population comprised a negligible share of Hungary's total population, in Transylvania it was roughly as large as the Jewish population (approx. 2.5 per cent of the total population). Unitarians almost universally spoke Hungarian, and they tended to be rather well educated. But, as we shall see, these factors had less than a clear impact on the Unitarians masses.

Nationwide, the difference between the two major Protestant denominations was maintained. Indeed, even the cohort inquiry fails to alter this finding: the education level of Lutherans aged 20-29 begins to resemble that of Jews, Calvinists and Roman Catholics. In Transylvania, German was the native language of 87 per cent of Lutherans; most of them lived in the Transylvanian Saxon towns. Already in 1880, 61 per cent of them were literate, and the figure rose to 76 per cent in 1910.

The first issue, therefore, concerns literacy rates in these larger groups in 1910, when cohort data are also available. Jews were the group acquiring literacy skills at the youngest age: by the age of six, almost one in three Jews could read. This was true of just one in four Lutherans, one in five Catholics, Calvinists, and Unitarians – even though this latter group was more educated in the end, and just one in ten Greek Catholics and Greek Orthodox.

Differences in literacy between the various cohorts by religious denomination indicate that the increase in literacy came to a halt among certain denominations but continued among others. The 95 per cent literacy rate exhibited by the Lutherans was achieved even by the cohort aged 40-44. That is to say, among this group, the literacy of children of school age was no better in 1910 than it had been in 1870 – although, of course, it had already been very high. The literacy rate for Catholics aged 12-34 remained steady at 87-88 per cent. Among Calvinists, however, a slight improvement could be observed, with a literacy rate of 80 per cent among those aged 30-40, 85 per cent among those aged 15-30, and almost 90 per cent among those aged 12-14.

The same trend was even clearer among Greek Catholics. Just over one in three Greek Catholics aged 30-35 was literate, but the ratio increased year-cohort by year-cohort, so that it exceeded 50 per cent among 12-14 year-olds. Among Greek Orthodox, a rate of 50 per cent score was reached among 30-34 year-olds; it then stabilised at about 55 per cent among the following cohorts before increasing towards 60 per cent among those aged 12-14.

Comparing these figures with our data on denominational over-representation in the various decades, *the over-representation of Calvinists becomes even more evident*, for in terms of primary school education the Roman Catholic population was in a better position even at the local level.

The fact that relatively few Jews attended university is actually indicative of a higher level of bourgeois development, a slowly improving educational strategy, and thus a steady increase in the educational level of the Jewish population with higher literacy rates. It is based on four grades of secondary school education and increasingly eight grades of secondary school education. And this development was followed – in compliance with the gradualist principle – by an increase in the number of university graduates.

#### Several additional modernisation indicators

Religious affiliation had a direct influence on literacy rates, in view of the fact that schools were usually run by the denominations and in light of the fact that religious instruction and other text-based instruction tended to be mutually reinforcing – so also were religious intellectualism and the probability of a secular intellectual "career choice". Yet in terms of the other indicators of modernisation – employment, settlement patterns, etc. – native language and ethnic background were more important than religious affiliation. Thus, we decided to use data on native language to partly express background factors. (Concerning literacy, we could have pointed out that the literacy rate in Transylvania was 56 per cent among Romanian children but 80 per cent among Hungarian children – i.e. 1.42 times higher.) Below we examine several indicators of modernisation, as an extension of the "third refinement" of the data.

The regional population included 306,000 Hungarian male wage-earners, 174,000 of whom were primary producers, and approximately 500,000 Romanian male wage-earners, 424,000 of whom were primary producers. This meant that 44 per cent of Hungarians but just 16 per cent of Romanians were employed in the *non-farming sector*. By this indicator, therefore, the local Hungarian population was 2.5 times more "developed" than the local Romanian population. A similar trend (i.e. a higher level of "development" among the Hungarian population) could also be observed in settlement patterns and employment. Without examining these factors individually, we may state – and this is more than a hypothesis – that *considering the educational, residential, employment and wealth disadvantages of Transylvania's Romanian population, the literacy rate of Romanian children (1.5 times lower than the literacy rate of Hungarian children) was relatively good. (MSK: vol. 56: 712-780; MSK: vol. 61: 286, 310, 338, 582, 514, 536)* 

At the same time, however, we should not ignore differences in the composition of the Hungarian and Romanian elite groups: in Transylvania, 0.447 per cent of Hungarian breadwinners and 0.454 per cent of Romanian breadwinners made a living as clerics. (MSK: vol. 16: 200) Although one should not ignore residential inequalities and the different functions of the various religious denominations, nevertheless it is remarkable that while the Romanian population lagged behind in terms of all other indicators, its share of clerics corresponded almost exactly (the difference was less than 0.01 per cent) with that of the Hungarian population.

Noteworthy also is the relatively small percentage of Romanian intellectuals employed in freelance white-collar professions. Not only were they disinclined to become lawyers, physicians or pharmacists (all professions requiring a university education), but they also seem to have avoided freelance professions that did not require university qualifications. For

instance, hardly any of them became private tutors – which indicates that Romanian primary school teachers were even less likely than their Hungarian fellows to abandon their secure teaching posts in schools. Romanians were also unlikely to become pharmacy assistants. Romanian newspaper writers and editors were similarly scarce: the numerous newspapers and journals published in Romanian were produced *not by professional ethnic Romanian* journalists, but by Romanian intellectuals with close ties to the education system and the church. (MSK: vol. 56: 490, 514, 530, 554, 578, 594)

Romanians that did not become teachers or priests tended to be employed in public administration or in management posts in the ecclesiastical sector.

Nonetheless, there was an additional factor: educated managers belonging to one of the ethnic minorities "swapped nationality" as they became part of the social upper class. That is to say, they self-identified as Hungarian, even without any pressure to do so. Without a detailed local historical analysis, it is clearly impossible to tell how an individual self-identified at various stages in his life. Nevertheless, regionally speaking – and in the case of Romanians, too – religious affiliation does provide us with an inkling, because changing one's religion (which required an *administrative* act) was less likely than changing one's nationality (which merely involved a *declaration* at the time of the census).

Let us now examine data offering insights into how all this was borne out. In 1900, we find that 54 ethnic Romanians were employed as agricultural managers in Transylvania. The figure is low compared with the figures for the two other ethnic groups (753 Hungarians and 96 Germans). However, if we consider the combined sum of Greek Catholics and Greek Orthodox among the whole group (i.e. 65), the share is somewhat higher. This, however, means that, in this group of agricultural managers, individuals of "Romanian" religious affiliation were 1.2 times more numerous than those who self-identified as Romanian. (We may safely assume that such Greek Catholics and Greek Orthodox were "originally Romanian", because Greek Catholics were negligible among the Hungarian population in Transylvania and practically non-existent among the German population, while education levels among the Ruthene population were extremely low.) (MSK: vol. 56: 490, 514, 530, 554, 578, 594)

The same trend is even more apparent in the industrial sector, for industrial managers tended to live in urban areas where assimilation rates were even higher. Indeed, in the group of industrial managers, we find 42 individuals self-identifying as Romanian and two as Ruthene, but 53 Greek Orthodox and 25 Greek Catholics – 1.79 times as many. We may conclude that, although Hungarians were more likely than Romanians to be employed as industrial managers, the Hungarian bias diminishes significantly if we deduct those individuals who had been assimilated into the Hungarian population, or those individuals who were Greek Orthodox or Greek Catholic and thus were, in all probability, originally Romanian. (Cf. Katus: 1979: 1153)

That this process of assimilation was spontaneous rather than enforced is strongly inferred by the fact that *public employees were less likely to change nationality*. Among Transylvania's public servants, we find 652 Romanians and 5 Serbs – compared with 4127 Hungarians – and 339 Greek Orthodox and 421 Greek Catholics. Thus, in this group, individuals affiliated with religious denominations that were Serbian or Romanian in character, were just 1.16 times more numerous than those who self-identified as Serbian or Romanian.

In the ecclesiastical sector, where there was no apparent motive for "denying" one's ethnic background, we find 2271 Romanians and 1368 Hungarians and also 1139 Greek Orthodox and 1157 Greek Catholics. Thus, individuals affiliated with "typically Romanian" religious denominations were just 1.011 more numerous than those who self-identified as Romanian. (A Greek Catholic Hungarian in the group may have caused this small deviation.) Similarly, in the mostly church-owned educational sector, 2749 Hungarians and 1664 Romanians were working, and there were 882 Greek Orthodox and 845 Greek Catholics. Here the ratio is 1.037 – hardly any higher than in the ecclesiastical sector. (*MSK: vol. 56: 742, 750*)

The above statistics demonstrate that relatively few Romanians were to be found among Transylvania's modern urban professionals, and that, in this group, Romanians were more likely to become assimilated.

Even so, an additional factor to consider is that, compared with the public sector or the ecclesiastical sector, the private business sector contained a relatively high proportion of assimilated Jews. And their native language, just one generation previously, would probably have been Yiddish or German. (Jews accounted for just 101 of the agricultural managers, but among industrial managers the 80 Romanians or assimilated Romanians represented a very small group in relation to over 1100 Hungarians and 670 Germans, of whom 750 were affiliated with the Jewish denomination). If we suppose that Hungarian was the native language of all 750 Jews (which is quite possible, since Hungarian was the native language of 90 per cent of the urban Jewish population and an even higher proportion of educated urban Jews), then the "remaining" 3-400 Christian Hungarian industrial managers amount to just 4-5 times the 80 or so industrial managers of Romanian origins.

The above analysis demonstrates the important influence of modern forms of employment on assimilation rates among the various ethnic and religious groups. They were not assimilated by their education at school or by educational policy, but by the educated milieu and their daily work, etc.

The under-representation of Romanians at Kolozsvár University's Humanities and Science Faculties should be interpreted in the light of such data.

# Exploring differences between graduates of the Faculty of Humanities and graduates of the Faculty of Science – a further possible method of analysis

In any comparison of the Faculty of Humanities and the Faculty of Science, several differences immediately become apparent:

1. Jewish graduates of the Faculty of Science are 1.5 time more numerous than Jewish graduates of the Faculty of Humanities. We may easily explain this by pointing to the stronger links between modern science and the economy.

By verifying the hypothesis in 1.1 we can determine – based on the father's occupation – whether or not Jews were more likely to come from the "technical/scientific sector" and from an urban milieu.

- 2. Lutherans were 1.1 times more likely to choose the Faculty of Science rather than the Faculty of Humanities.
- 2.1.According to our first hypothesis, the Lutheran urban population, which was relatively advanced and more likely to be active in industry, commerce, technology, and science, was inclined towards scientific subjects rather than the humanities.
- 2.2. The German-speaking Transylvanian Saxon burghers, who exhibited little inclination to assimilate at the turn of the century, were disinclined to study Hungarian at university (because this required them to perfect their knowledge of Hungarian) or to

study History (because this required them to identify with Hungarian history as it was taught at the time, which in turn conflicted with their Transylvanian Saxon identity).

- 3. Roman Catholics were 1.3 times more likely to study at the Faculty of Science than at the Faculty of Humanities, while, conversely, Calvinists were 0.7 times less likely to study at the Faculty of Science than at the Faculty of Humanities.
- 3.1 We may assume that in the humanities, where denominational links were stronger (above all, in such subjects as History, Hungarian, and even Modern Foreign Languages – due to the symbolic code system of languages), students were more likely to be influenced by the religious affiliation of a distant university when making their choice. That is to say, Budapest was less attractive as a centre of the humanities for Calvinists living in or near Transylvania.
- 4. Greek Orthodox students were 1.2 times more likely to study at the Faculty of Science.
- 4.1. Where the native language of a student was Romanian or Serbian, this in itself could render him less likely to choose the Faculty of Humanities. Greek Catholics could serve as a control group, because they were just as likely to choose the Faculty of Humanities as the Faculty of Science. It is thus worth examining whether there is any circumstance that would create a distinction between groups that were known to be equally unlikely to speak Hungarian as the native language.
- 4.2. The training of Greek Orthodox priests probably reduced the number of Greek Orthodox students in the humanities, but it would not have affected science subjects.

## The religious composition of non-Transylvanian students at Kolozsvár University

The two faculties at Kolozsvár provided a university education not just to Transylvanians but also to other students from eastern Hungary. Whereas in Transylvania there was one student of the Faculties of Humanities and Science for every 1000 inhabitants, the corresponding ratio was 1/6000 in Eastern Hungary (the region to the east of the River Tisza). Meanwhile, the ratio in the Tisza-Maros region was just 1/15,000, even though it lay close to Kolozsvár. An apparent explanation for the difference between these two regions is that Eastern Hungary had a high percentage of Calvinists and was the location of the Calvinist stronghold of Debrecen (whose Calvinist secondary schools pushed students towards careers in teaching), whereas the Tisza-Maros region had only a small Calvinist population.

The ratio was 1/10,000 in Central Hungary (the region between the Danube and Tisza, including Budapest), Eastern Upper Hungary (today, eastern parts of Slovakia), and Transdanubia. The two most distant regions of Hungary exhibited the lowest ratios, with 1/15,000 in Western Upper Hungary (today, western parts of Slovakia) and 1/25,000 in Fiume (today, Rijeka in Croatia).

No data	156	3.9
W. Upper Hungary	145	3.6
Transdanubia	319	8.0
Central Hungary	360	9.0
E. Upper Hungary	203	5.1
Eastern Hungary	400	10.0
Tisza-Maros Region	136	3.4
Beyond Királyhágó	2260	56.7
Fiume area	2	0.1
Croatia-Slavonia	4	0.1
	3985	100.0

Table 7: Place of birth of graduates of Kolozsvár University

According to our hypothesis, the reason why the proximity of birthplace had a relatively small effect on the choice of university was that most of the university students were born when their fathers were young adults and their fathers later changed their place of residence owing to job promotion or to social mobility. We assumed that this place of residence was nearer to Kolozsvár. Since we were less likely to know the place of residence of the father or breadwinner than the place of birth, we supplemented data concerning the "recent place of residence" with data concerning the place of secondary school education. There was no change in the results. If, however, we ignore the data for unknown birthplace, place of residence and place of secondary school education, the share of Transylvanians increases marginally (from 59 per cent to 61.3 per cent). (In the above, we already considered this Transylvanian group.) The ratio exhibited by inhabitants of Transdanubia, which is already very low, decreases by about this amount.

Calvinists are over-represented among students from all areas of the country: they are twice as numerous among students from Transdanubia, Western Upper Hungary, and Central Hungary, and 1.5 times as numerous among students from Eastern Upper Hungary and Eastern Hungary. Calvinist over-representation among students increases as the distance from Transylvania grows and it becomes more and more illogical for Catholics to choose Kolozsvár (rather than Budapest). The only exception is the Tisza-Maros Region, adjacent to Transylvania, where Calvinist over-representation is threefold. However, the Tisza-Maros Region has a high proportion of Orthodox Serbs. If the Calvinist over-representation is calculated based on Hungarian native speakers in the region, here too the over-representation factor falls to 1.5.

### Religious affiliation and academic achievement

A basis for measuring academic achievement rather than mere student presence is the number of students obtaining doctorates. They accounted for approximately one in ten students from Transylvania.

	N		Percentage
No data		1	0.4
Roman Catholic		70	30.4
Greek Catholic		14	6.1
Calvinist		76	33.0
Lutheran		33	14.3

Table 8:

	N	Percentage
Unitarian	21	9.1
Greek Orthodox	6	2.6
Jewish	7	3.0
Armenian Catholic	2	0.9
	230	100.0

These figures demonstrate that Catholics were over-represented (by a factor of 1.2) and Calvinists were under-represented (by a factor of 0.8) in comparison with their original share of students (their undergraduate ratios). This means that although Kolozsvár University was more likely to be the obvious choice of Calvinists than it was of Catholics, nevertheless within the university itself the situation was reversed – accurately reflecting the higher level of social development exhibited by Transylvanian Catholics. An observation of limited significance due to the small figures but still worthy of note is that Greek Catholics, Greek Orthodox and Jews were all over-represented among doctoral graduates (by a factor of 1.5). Evidently, among communities whose access to secular education has traditionally been limited, where the family strategy did in fact favour academic study, obtaining a doctorate was regarded as a worthwhile endeavour. (Or conversely: those who did make it to university tended to be more ambitious and talented than their Calvinist and Catholic fellows.)

## Extending the inquiry to cover the elite group

The next logical step in our inquiry – and still connected to the under- or over-representation of different religious groups – was to determine which graduates of the Humanities and Science Faculties (and how many of them) subsequently joined the social elite. It seems that 6-6.5 per cent became part of the elite, based on the encyclopedia data.<sup>43</sup>

	Graduates of	Transylvanian
	Kolozsvár	Graduates of
		Kolozsvár
		University
Roman Catholic	36.0	34.5
Greek Catholic	2.7	
Calvinist	44.1	45.5
Lutheran	7.2	3.6
Unitarian	6.3	12.7
Jewish	3.6	3.6

Kolozsvár University's Calvinist graduates were more likely to become part of the elite than were its Roman Catholic graduates. This may have been because Catholic elite positions tended to be occupied by graduates of Budapest University – or because Catholic groups that were predestined to acquire elite positions tended to choose Budapest University rather than Kolozsvár. Calvinist students at Kolozsvár University from areas outside Transylvania had a better chance of becoming part of the social elite than did Calvinists from Transylvania –

<sup>&</sup>lt;sup>43</sup> Although the "encyclopedia elite" has been fully elaborated, for reasons of convenience we compared just one part of it (surnames G - P), comprising 11,300 members of the elite, with the list of graduates of Kolozsvár University. We put forward the ratio of 6-6.5 per cent, based on the assumption that the percentages for the G-P section would be the same for the total population.

evidently, those travelling to Kolozsvár from greater distances were more likely than locals to be predestined to acquire elite positions. Transylvanian Lutherans were unlikely to become part of the elite, because as German native speakers they were less likely to appear in an encyclopedia that reflected national (Hungarian) recruitment trends. This was particularly so, given that, in the post-Trianon era, they were disinclined to come to Hungary and thus their achievements were not even considered by encyclopedias published in the country. Lutherans from other areas do better, but only just attain their representative level.

Greek Orthodox and Greek Catholic graduates did worst; those from Transylvania were practically absent from the elite, while those from elsewhere were present in just small numbers. This may be explained in part by the elite formation factors' indifference towards Romanians and in part by the objective rules of mobility. We may regard becoming part of the elite as the next step on the mobility scale – a step that is necessarily more remote for Greek Orthodox and Greek Catholic Romanians, who tend to set out from a relatively low level of school education.

On the other hand, the probability of Jews becoming part of the elite is almost twice their graduate ratio, and Unitarians are also over-represented, particularly those from Transylvania.

The fact that Catholics comprised a majority of doctoral graduates but Calvinists a majority of graduates in the elite (based on encyclopedia data) may be explained by the fact that, in contrast to the intra-university selection of students based on academic performance, the social (encyclopedia) elite was supplemented by political, public, literary and artistic elite groups, in which religious affiliation (and intra-denominational connections) was (were) more important than the possession of a doctorate.

All this could be the subject of another paper.

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Analysing the religious affiliation of graduates of the two faculties of Kolozsvár University, we perceive an institution that seems to have functioned increasingly as a Calvinist centre, but where – at least during the First World War period – Transylvania's Jewish population was also over-represented, while the ethnic German population and the upwardly mobile Romanian middle classes were clearly disfavoured.

## Paksi, Veronika

## Academic career of women and men in the field of natural science: work-life balance and obstacles to professional progress

### Women on the labour market

Before the nineties, the rate of female employment was artificially high in Hungary. Women being overburdened, the traditional model of family could no longer persist. Alongside, higher qualifications became accessible for women: their education level increased and scientific career opportunities opened up for them. The higher education level offered new life perspectives, more numerous opportunities on the labour market, the possibility of success and career advancement, as well as a higher income. This new financial resources raised their