

PhD Thesis Abstract
Doctoral School of Earth Sciences

The spread of cinema in Hungary as an innovation,
and the geographical characteristics of the network's
evolution up to now

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1. Introduction

With the first public screening on the 28th of December 1895 in Paris, a new chapter was started in human culture. After several experiments ending up deadlocked or bringing unaccomplished results, a technical innovation which recorded and reproduced motion regardless of space and time the Cinematograph of the Lumière-brothers started almost immediately its world-conquering trip. The first innovational centers of the diffusion process – in HÄGERSTRAND’s sense – were, besides Paris, the big cities of Europe, Wien, Berlin and Budapest.

The film - the one-time entertainment industry product which used to appear in coffee shops, in entertainment quarters, in show booths at fairs - in a decade and a half evolved – in accordance with the European trends also in Hungary – its own authentic scene, the cinema.

The differentiation of motion picture recording and transmission techniques, the television, the VHS, the DVD, and recently the diffusion of internet are all plunging the cinema as institution – even if at a different pace in each settlement – into an increasingly disadvantageous position on a global scale. While the number of feature films meant for cinema distribution, together with a wide range of motion picture productions was continuously increasing, the authentic transmission medium, the cinema network was shrinking more and more, and the focus of delivering the compositions to the viewers was shifted to the television and to the videotape.

At the time when film and cinema appeared, and when sound-film was gaining ground, trends perceived in Hungary synchronized with those in the European core regions. However in its other lifecycles the social, political and economic traumas and changes of the regimes (the Treaty of Versailles, the dead end experiment of socialism for organizing society) imposed *other directions than those in Europe* on the evolution of the network.

The change of the regime in 1990, and the return to market economy resulted in – despite the endeavors for modernization – the cinemas’ losing ground at a pace never experienced before. Not even the motion picture law – which came into effect in 2004 and was meant to rescue the film trade – regulating and warranting the state’s role and the subvention system could stop the trend.

The phenomena raises a series of questions regarding the film trade and of socio-political nature, e.g. unequal chance to access cultural products, there will be a flourishing film industry as a result of the subvention, but there will be no adequate transmission network etc.

The dissertation deals with the macro process the elements whereof have been sketched out above, from various (geographical, economic, and innovation theoretic) aspects. It consciously avoids the thorough dissection of unique characteristics, typical only for a few settlements. For conceptual reasons deliberately refrains from formulating an assessment relating to the fields of film history, film esthetics and the sociology of reception.

2. Theory, research background

The subject and the approach chosen is leaning on – besides the strictly professional film researches – the results of several science areas (geography, economics, innovation theory and statistics) as research antecedents.

In the large and divergent *film literature and in scientific researches* (film history, film esthetics, film sociology, film-semiotics) the cinema – though to different extent from age to age but – is *taking in general a marginal position*. In the early film trade press we can come across a publication of scientific quality only as a rare exception (CASTIGLIONE H. 1911, 1912, 1913). The first relatively long-winded scientific analysis of KÖRMENDY ÉKES L. (1915) had the particular value of holistic approach, the elaboration of the contemporary German film literature, furthermore – not yet given the state as data-supplier – the first extensive and systemized statistical data publication. Film history writers have diverse relation to cinema. In the cases of some authors by recording the place, the date and the program of the first appearance of a film, the transmission medium becomes also part of motion picture history e.g. MAGYAR B. (1966) és KISPÉTER M (1938). In other cases not even the first projection place is mentioned e.g. HEVESY I. (1993).

The situation is similar in foreign film literature as well. LEBEGYEV, N. A. (1965) touched upon the first projection places, and then to the first cinemas showing up in Russia. Several writers in the field of national film history in Europe (BENARD da COSTA, J. 1990, KWIATOWSKI, A. 1986, MORTIMORE, R. 1986) record the place and date of the first projection only. Among the notabilities of foreign film literature, the study of SADOUL, G. (1957), GREGOR, U. – PATALAS, E. (1966) co-authors – considered also at international level as a standard – concentrates only on the piece of work and ignores the cinema.

Out of the quite extensive *innovation-theoretic researches* the essay is leaning on the school founder, systemizing publications, or on the ones that further elaborated basic doctrines. From the international literature on the works of SCHUMPETER, J. A. (1980), HÄGERSTRAND, T. (1965), from Hungary on those of GÁBOR D. (2000), GÁSPÁR L. (1998), KOVÁCS GY. (2204) és RECHNITZER J. (1993, 2002).

The statistics dealt officially with this important institution of public entertainment only from 1927. The scientific analysis of the first data supplies was performed by DARVAS GY. (1928, 1929, 1930), JÁNKI GY. (1936). Among the statistical publications the works of CASTIGLIONE H. (1929, 1935a, 1935b, 1935c, 1936a, 1936b, 1936c, 1936d, 1938, 1958) deserve attention. From the approach of the essay all of them are inevitable, not avoiding critical reflections though.

The cinema – as the subject of the research – is equal in age with the boost of cultural geography, the new discipline at the millennium end. In two standard works of the new science area (TÓTH J. – TRÓCSÁNYI A. 1997, TRÓCSÁNYI A. – TÓTH J. 2002), the cinema appears for the first time as equal in rank to the other elements of the infrastructure of culture. For methodological reasons I considered

as research antecedents the history-geographical works of FRISNYÁK S. (1999) and settlement-geographical works of BELUSZKY P. (1973, 2004).

Numerous publications of the Anglo-Saxon and German cultural geography scholars AITKEN, S., ZONN, L., LUKINBEAL, CH., ZIMMERMANN, S. etc.) attest to the generally experienced work-of-art-centered nature of scientific interest. Film geography (or geography of cinema) introduced as a new science area focuses its interest on the real or virtual scenery – capable of transmitting various contents – presented in the film (ESCHER, A. 2006, LUKINBEAL, CH. – ZIMMERMANN, S. 2006).

Several science branches (a variety of history sciences, communication theory, sociology, psychology ...etc.) deal in depth with film, with motion picture, with its history, its idioms, its semiotic and with its effect mechanism. However the cinema, the first and authentic transmission system of film is treated rather badly by scientific interest. The research and its objectives set out are related to this fact, no secret that also with a niche-filling intension:

1. Beyond the statistical presentation of the technical and cultural innovation transmitting the film to the viewer, *the cinema* appearing and spreading in Hungary, *the elaboration of its lifecycle in the country from a new, historic approach, the presentation of the driving force behind the changes* from the very start all along up to now.

2. *An innovation theory modeling* of the phenomenon's diffusion, the study of its spread *in different social and economic* (market economy, mixed, centralized) *surroundings*, the introduction to differences and identities influencing the certain periods of the lifecycle.

3. *Revealing the space-specific (local, regional) characteristics* of the cinema network in different periods at a given phase of the lifecycle.

4. At last but not least *raising questions and problems* about the present state of cinema network, *regarding the profession and the society*.

3. Materials and methods

In laying the foundation of my PhD dissertation the source research required by the historical approach bore particular importance. After the detailed revision of the relevant material filed in the State Archives of Hungary, in the Hungarian Central Statistical Office's archive and in some county archives (Borsod-Abaúj-Zemplén, Pest) it proved to be the case, that settlement-serial analytical data – of standardized approach and of identical data gathering purpose – about the evolution of the Hungarian cinema network can not be found. This may have various reasons, which are construed by the essay.

My research in the archives was supplemented by my document discovery pursuits in the broadside and leaflet collection of the National Széchényi Library, in the Hungarian Central Statistical Office's Library and in that of the Hungarian National Film Archive. On the basis of the data collected in the two institution

groups, the reconstruction of the periods lacking in information, was feasible with acceptable certainty.

Resulting from the above the database of the dissertation is constituted of different sources. Until the first official survey of the Hungarian Central Statistical Office (HCSO) in 1927, I leaned on other documents found in the earlier mentioned institutes, and on the data I came across in scientific publications e.g. CASTIGLIONE L. (1911-1912, 1913a, 1913b, 1936a, 1936b, 1936c, 1936d), KÖRMENDI ÉKES. L. (1915), MAGYAR B. (1966). Between 1935 and 1950 when there was no data collection by the state either, the film almanac of LAJTA A., then the year-books of the Central Statistical Office, furthermore the on-line accessible data stores of the HCSO and of the Ministry of Culture formed the base of the analysis.

During making comparison, the divergent professional content of the different datasets occurred as a problem. In the case of some sources (e.g. HCSO year-book), the number of cinemas covers besides the functioning establishments, also those that are temporarily closed, temporarily open, ceased to exist during the year of review but before the end date of the data survey, and also the strictly exclusive projecting places of the church, of healthcare, of educational and of military institutes. They are included in a way that their detaching is impossible due to the lack of adequate analytical data. Other sources (e.g. the privately published almanacs of LAJTA A.) provide also the opportunity to sort out the cumulative data, while in the case of a third group (HCSO thematic publications) only those cinemas occur which were in fact functioning at the date of the data survey. As a result of all these opportunities and limitations I worked always in a well-confined phase of the whole life cycle from a dataset of identical facts, always describing its content (cinemas, functioning cinemas). In the case of a long time-series comparison or of a comparison covering the whole lifecycle, I chose the broadest conceptual interpretation, but occasionally when I had the possibility I presented the difference between the whole statistical stock and the functioning units.

The broadest possible research and analysis of film literature and of relevant related science fields (statistics, sociology, communication theory), the utilization of information provided by other publications and vocational brochures was equivalent process to the source research.

The experience and knowledge I acquired as leader and as administrator in the field of educational and cultural governance on county and on country level, the assessments and analyses I carried out on the topic served as content and informational background for the dissertation.

In the analytical parts, out of the statistical methods I used different variations of forming various datasets, statistical ratios, dispersion testing, correlation counting and graphical illustration.

For data processing, for derivation of new data, for designing graphics I used Microsoft Excel. For visualization of maps, cartograms, choropleth maps I used Windows XP Paint, Mapinfo and Adobe Photoshop programs, depending on the map type.

In the planning and realization of the research and in the formation of the dissertation I aspired to apply the methods of other science areas (economic science, sociology, historical geography) as well.

4. Results

4.1. The appearance and spread of silent film

The cultural innovation at the end of the 19th century, the motion picture, the cinema started its world-conquering trip with an amazing speed after its introduction on the 28th of December 1895. The invention appeared right next spring in the European capitals, in economic and cultural centers. Projections were organized for the public in Wien, Berlin, Budapest, during the summer also in Madrid, in St. Petersburg, Malmö, Moscow, Stockholm and in Helsinki.

In the first period of the introduction and spread of motion picture in Hungary, until the first decade of the 20th century projection places were odd ventures, without demand for permanence. They maintained their activity usually with a showman's operation license from the police authorities, valid for two months.

This new form of relaxation, of pleasant pastime, of public entertainment was spreading rapidly. Right in the year of the introduction (1896) – besides the four attempts in Budapest – there were projections also in the country (Sopron, Győr) as the traces prove. Until the end of the century, eight entrepreneurs' nine shorter or longer lasting operation periods are evidenced by the local fee records of the capital's account office. The local press, posters and leaflets give notice about the appearance in the country: in 1897 it came to projection in Szolnok in 1898-ban in Gyöngyös, Gyulafehérvár, Erzsébetváros, Kézdivásárhely, Balázsfalva, Alsó-Kubin, Eger, Hajdúnánáson, Erzsébetfalva, (now XX. district of Budapest), in 1899 in Szentés and Nagykanizsa. Furthermore, as attested by the documents kept in the broadside and leaflet collection of the National Széchényi Library, in 1898 the inhabitants of Galánta, Túrócszentmárton, Kassa, Nyírbátor, Nyíregyháza, Szentés, Hódmezővásárhely, Torda, Nagyenyed, Újvidék, Temesvár, József-szállás) also had the chance to get acquainted with motion picture.

About the second, expansive phase of motion picture's diffusion, which lasted until about 1907, two characteristics can be observed. One: the first applying *venture groups traveling around the country develop and become solid.* Due to their activity the number of settlements where cinematographs appear, dynamically increase. The other: with the broadening of the number and variety in the available film supply the migrant cinemas return more frequently to the places where interest is higher. It also happens that more than one ventures appear in the same place. In those settlements showing the highest interest, on the basis of a theatre, coffee shop, inn or hotel *began to evolve the conditions of frequent, and then regular projections.* These were the sub-centers constituting the foundation of the permanent cinema network to come, where already stabile projection places

function (Debrecen, Hódmezővásárhely, Székesfehérvár, Fiume, Nagybecskerek, Versec, Kaposvár, Kispest).

The third phase of the cinema network's development can be linked to the appearance of permanent movie theatres in large numbers. The beginning of the tendency can be put at the last years of the first decade of the century. By 1910 besides those in the capital, there were permanent cinemas in more than 30 settlements (beyond those mentioned earlier, e.g. Baja Hajdúböszörmény, Kaposvár, Sopron, Szeged).

The domestic tendencies of the cinema's gaining ground in this period were absolute parallel to the European trends. The first permanent cinema in Berlin was opened in 1905 on the boulevard "Unter den Linden". In 1912 only the Netherlands preceded Hungary in the number of inhabitants per cinema, and taking the territorial condensation (cinema/m²) as a base, Belgium, Germany, England and France. According to a report released by KÖRMENDY ÉKES L. (1915) – considering only urban areas – there were 92 permanently functioning cinemas in Budapest, in 25 municipalities 63, and in 68 towns with regular council 114 (269 in total).

The First World War, the Treaty of Trianon entirely reorganized the frames of functioning in film trade. As a result of the Versailles Treaty the counterpoints (Arad, Kassa, Kolozsvár, Nagyvárad, Pozsony, Temesvár, Zágráb) representing the provincial core regions of economic growth were detached from the mother country, from the organic centre, from Budapest. In the case of cinema network it meant the lost of more than 60% of the provincial network. Detailed data are presented in the dissertation.

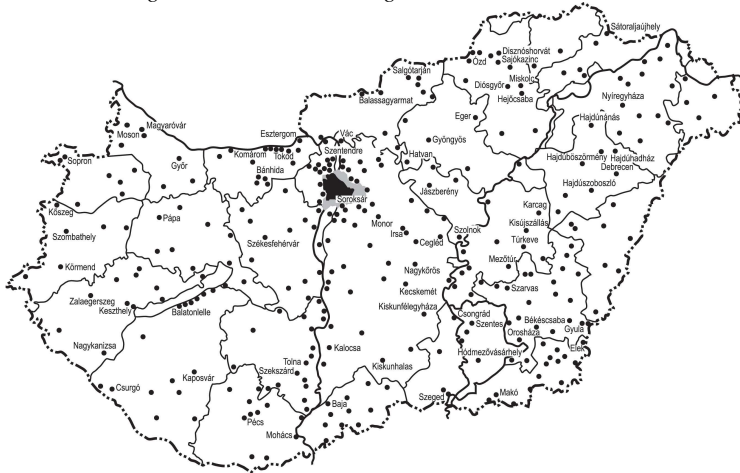
The fourth phase in the spread of cinema represents the vigorous saturation, so the majority of later cinemas was founded in the 1920-ies. The overdevelopment is evidenced – besides the ephemeral ventures – mostly by the state's applying legal regulation, delimitation. As a first step, they start data gathering regarding the motion picture works in 1927. Following this, in 1928 the Home Secretary regulates by a statute the number of permissions that can be granted in each settlement, in order to avoid harmful proliferation.

From the Treaty until the first official data gathering in 1927, the number of cinemas almost doubled on the remaining territory of the country. The network made up of 501 elements covered about the 9.6 % of the country's entire settlement strength.

The territorial dispersion of works in operation was rather uneven. The detailed territorial characteristics set forth in the dissertation are illustrated by the 1st figure.

The settlement-type based examination underlines the urban characteristics of cinema as a phenomenon. Besides all the municipalities, 97.8 % of towns with regular council (all except for Veszprém), 24.9 % of big villages, 0.05 % of small villages had cinemas at the time of the data survey.

Figure 1 Settlements having active cinemas in 1927



Source: The author's own drawing based DARVAS Gy. (1928)

4.2. The appearance and diffusion of sound-film

The dissertation introduces the formation of cinema network by comparative analysis based on quantitative indexes and on territorial, and settlement type distribution, touching also upon the characteristics of the innovation's diffusion. The summary of its establishments:

The appearance of sound-films in 1929 befell the Hungarian cinema network in its last phase of diffusion, in the period of saturation. The 10-11% growth of the network, perceived countrywide in the last two years of the silent film era, took place primarily in rural areas on the peripheries. It also refers to the fact of the earlier mentioned saturation/supersaturation that besides the growing of the network, the number of viewers firmly decreased by 13.1 %.

It would be relatively easy to impute the decline in the number of viewers exclusively to the impact of the Great Depression on the standard of living and to the consumer habits being restructured as a result. Yet besides the positive tendency of network development, the decrease in the number of viewers was perceptible already in 1928.

The appearance of sound-film in Hungary was rather reluctantly welcomed by the cinematograph trade. The business federation of the profession expressly forbade in May 1929 to its members to change over to the new technique in the 1929-30 feature-film season. In spite of the decree, on the 19th of September 1929 the first presentation was realized in the Forum Movie Theatre. It was followed by several provincial towns right in the same year, e.g. Győr, Sopron,

Baja, Kaposvár, Szekszárd, Békéscsaba, Budafok, Gyöngyös, Keszthely, Rákosszentmihály, Hatvan.

One year later in 1930 already more than 10 % of the Hungarian cinemas changed over to sound-film projection, which shows the speed of the diffusion. The Europe-wide spread of the innovation affecting silent film, the entertaining and educational instrument which became already general, was the most dynamic in England and in the Netherlands. Within a single year one third of their cinemas switched to sound film. During the same time the 27.5 % of the cinemas in Germany, and 22.6% of those in Austria renewed. Our country with its 10.5% rate accompanied by Finland (13,2%), France (13,1%), Swiss (13,1%), Poland (11%) and Norway (10.3%) belonged to the mainstream, considerably preceding Italy (3,2%), Spain (6,1%) and Sweden (7,3%) (JASON, A.1935).

During the half decade between the two data collections in 1929 and 1935 the structure of the operating Hungarian cinemas was significantly realigned. The costs of switching to the new technique, the continuously increasing technical requirements, and the effects of the economic crisis on consumer structure could all play a role in the intensification of market-based selection, leading to the vigorous shrinkage of the network. *The tendency was otherwise not an exclusively Hungarian phenomenon. A similar process took place in Germany, France, Spain, Sweden out of the leading countries of film trade in Europe.*

The data survey in 1935 in Hungary registered 410 ordinarily operated, functioning cinemas. They already projected in 85.9% sound-films. However the number of movies decreased within five years by more than one fourth, to the 73.9% of the base value in 1929. A similar shrinkage can be observed in the number of supplied settlements, which affected only the rural areas.

On the whole, with the decrease in the number of cinemas and of settlements supplied with cinema, in the first half decade of the sound-film era, the 52.4 % of Hungary's population (3.4% decline compared to 1929), and 46.1% of the provincial (without the capital) population (3.9% decline) could go to cinema in their own dwelling places.

The third fourth of the 1930ies can be considered as the period of quiet development from the aspect of film distribution. In three years after the 1935 national data survey, the number of cinemas increased by more than one fourth. As the market of towns and of communities with the highest population was almost entirely covered, the bulk of the expansion took place in settlements with a population of 5-10 or 3-5 thousand, affecting 26 in the former and 32 in the latter ones. Altogether in 85 settlements was film projection launched.

The expansion affected the county of Pest to the greatest extent. The market must have preferred the nearness of the capital, or the good spatial relation to it (e.g. Alag, Alberti, Albertfalva, Pomáz, Szigetszentmiklós). In other cases the nearness of a town already supplied with cinema could be the possible reason, as this could mean a valuable advantage regarding copy transport (e.g. Alpár, Dunabogdány, Pilismarót, Újszász, Verseg).

In Békés County the process covered seven settlements primarily in the area of Orosháza, Szarvas and Szeghalom (Csorvás, Gádoros, Kondoros, Körösladány, Köröstarcsa, Nagyszénás, Ócsöd). In the counties of Győr-Moson-Pozsony and Vas was no change. In the other cases 1-2 settlements per county were affected. In each case the logistic aspects mentioned before can be detected.

As a result of the process, *by 1938, by the appearance of narrow-film cinema, a sort of stable spine of the network more or less was founded on the basis of the 35 mm sound-film.*

4.3. The appearance of narrow-film cinema and its impact on the evolution of the cinema network

The dissertation – considering that the new technique will be a dominant factor for decades – gives distinct attention – besides the examination of the economic and social roots - to the geographical and innovation theoretical analysis of the spread of narrow-film cinema. The research establishes as its result:

The evolution of the cinema network in the 1930-ies, beside the appearance of sound film, was influenced also by important social and economic factors. As a result of the world slump and social destabilization along with radicalization, the merge and gradual domination of fascism, National Socialism and communism, and the whole film trade becoming politicized, the ideological charge of movies and the propagandized use of them increased in whole Europe.

The desire to exploit the propagandist force residing in movies comes reasonably together with the expansion of the allocation means. In order to enlarge the impact of the newsreel interpreting the daily events in an adequate manner to actual politics and of the movies corresponding to the spirit of the age, the target areas of the expansion had to include those areas not preferred by the competitive markets, and rural areas which were obstructed from cinema operation by the government via a decree issued by the Ministry of Home Affairs. The involvement of these regions into the motion picture catering with the lowest possible capital investment, utilizing the establishments built to fulfill other functions, was realized by applying the 16 mm technique.

The 16 mm technique originally developed by the Kodak works for amateurs, some years after the practice already being introduced abroad, was permitted by a decree of the Ministry of The Interior at the end of 1938. At the time of the announcement of the decree there were already 8 000 narrow-film cinemas operating in France, more than 10 000 in Germany.

The contemporary trade press interpreted the piece of news as an event of historical significance. By the end of 1939 the number of narrow-film cinemas in operation increased to 73 (five of them – Bős, Felsőszeli, Magyarszógyén, Muzsila and Szepsi – fell outside the present territory of Hungary) and affected nearly 234 thousand residents.

The process of the diffusion was not slowed down neither by the country's indirect nor by the later de jure involvement in the war. The 1st of

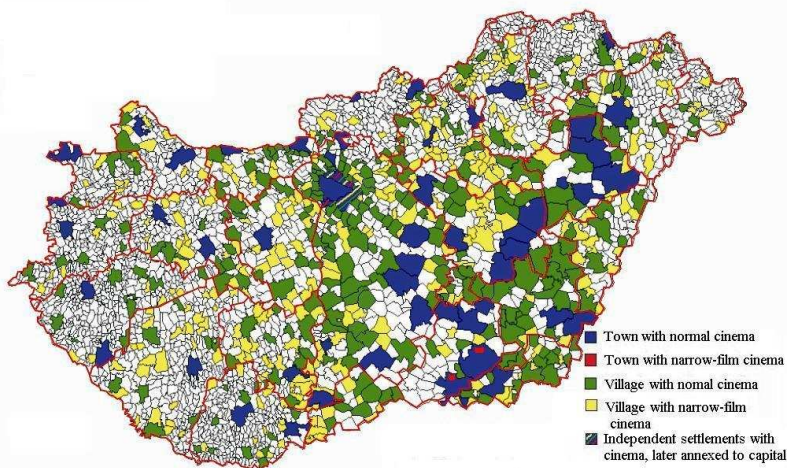
October 1943 – in the last year when there was no fighting yet on the territory of the country – the number of narrow-film cinema licences increased to 378 fell on the present territory of the country, and it drawn 367 new settlements into the motion picture network.

When examining the spatial dispersion, the strong influence of the settlement structure characteristics can clearly be detected. In counties predominantly composed of tiny villages (Abaúj, Baranya, Szatmár-Bereg, Vas, Zala) hardly any of the settlements (with a dispersion of 0,8-4,2%) was touched by the process, in contrast to counties with a significant number of large villages (Pest-Pilis-Solt-Nagykun, Fejér, Heves).

In this period of the narrow-film cinema expansion, primarily the intention to reach rural areas with a relatively high population concentration can be detected. But then beside the market economy-like motives of innovation diffusion a new element appears prominently, namely the ideological background generating the whole process. This is implied from the end of the 1930-ies by the centralized obligatory determination of films and newsreels to be played by the movie theaters just as much as by the particular program policy of the newly established network.

In the postwar years a breakage ensued - due to the obscurity of resumption, restoration and transformation - in the evolution of the cinema network, just like in other fields of the socio-economic sphere in Hungary. Despite all uncertainty as a result of restoration by the end of 1948 the cinema network (Figure 2) – including also the narrow-film cinema park – almost reached the conditions of 1943.

Figure 2 Spatial network of Hungarian cinemas in 1948



Source: The author's own drawing based on LAJTA A. (1949)

The year of 1948 brought radical changes for the profession operating under rather chaotic circumstances. The XXV. Act of 1949 about the first five-year plan leaves no more doubt concerning the role intended for the movie by the new regime. After secularization the management rights of the cinemas was assigned to the county councils. Cinema corporations of each county were established. Even a competition evolved among the organizations established with supply-duty for conducting the tasks defined by politics, primarily in order to ensure the supplying of the villages with films.

Market economy was replaced by the so-called plan economy, a system of state curtailment and redistribution in which the features of market economy had no more part. Innovations were not based on organic market processes, but social-, economic- and cultural policy decisions motivated by class struggle ideology.

As an achievement of the dynamic expansion aspiring to fully comprehensive supply until 1960, the number of cinemas in Hungary has been multiplied by 6,5 that of the narrow film by 11 compared to 1948.

The enlargement of the network resulted in all the large- and giant-villages of the Great Plain counties (Bács-Kiskun, Békés, Csongrád, Hajdú-Bihar, Szolnok), and all the settlements of Komárom and Tolna counties being provided with cinemas by 1960. The program of providing each settlement with cinema was realizable in the 80-90% of the communities in counties with tiny villages.

The intention to meet the centrally defined expectations concluded in besides a compromise on moral, quality, engineering and technology principles also in other anomalies:

- The realization of high plan objectives necessarily forced the low-cost and simplified solutions. As one of the low investment versions of this, the new projecting places were set up in leased estates in the possession of local councils or co-ops.
- The faster supply of village inhabitants led to new operational forms (travelling cinemas, district cinemas). Their proportion was rather high.
- The narrow film although originally introduced to serve the countryside and rural areas gained also ground in towns in this period of comprehensive expansion, and with its 83,9% share it became the dominant technique in the Hungarian cinema network by 1960. 58,3% of the urban cinemas and 86% of village cinemas used narrow films.

The evolution of the Hungarian narrow-film cinema between 1949 and 1960 can not be interpreted according to the classical models of spatial diffusion of innovation. That is the decisions about network expansion were taken in ruling administrative centers like verdicts, primary innovation centers can not be defined, the process itself is conversed, as it penetrates as a makeshift from peripheral places, from the villages into the centers of social and economic life, into towns and towns of county rank.

The size of the whole cinema network – including narrow-film cinema network – reached its peak in 1960. These year the Hungarian Television switched to 5 days a week program service. The rival war for spectators has begun. The number of spectators decreased, the operation of the cinema network became loss-making in Hungary after 1963. With few exceptions all the 16 mm projecting places had a negative operating balance. The deficit was undertaken by the state budget, and the difference was disbursed to the cinema corporations under the title of sale price amplification. This fact enforced the rationalization of the overdeveloped network and concluded in the elimination of uneconomical and useless parallelism.

At the middle of the 1980ies the penetration of market economy elements into the system of the Hungarian economy, implied the nosedive of the 16 mm network in the second half of the decade. At the turn of the decade narrow-film cinema loses its dominancy within the whole network, with the restructuring of the subsidy system it practically ceases to exist by the middle of the new decade.

4.4. The situation of normal cinemas from 1938 to 1995

With the appearance of the narrow-film cinema (16 mm) method in 1938 between the two different, incompatible systems the division of the market and application fields was carried out. In this regard the cinemas behaved in line with the model about the interaction between innovations and techniques already in use, proposed by KOVÁCS GY. (2004), namely they used the old and the new techniques separately. The earlier solid market divided in two parts. Both of the projection methods spread on those segments of the application areas, where they achieved the highest efficiency. The original market division resulted along the center-periphery positions. The fixed, immobile technique of normal film (35 mm), became the instrument for the urbanized places and those at a higher level of urbanization, while the easily movable narrow film (16 mm) system served the rural areas.

As those parts of the country not yet covered by the market were predominantly rural areas, the dynamic quantitative growing of the normal mode cinema was relegated to the background for nearly two decades. Its development was enforced only by the competition battle against the television in the 1960ies. The increase in the number of normal cinemas for two decades yielded spectacular results particularly by the operation mode switch of rural cinemas.

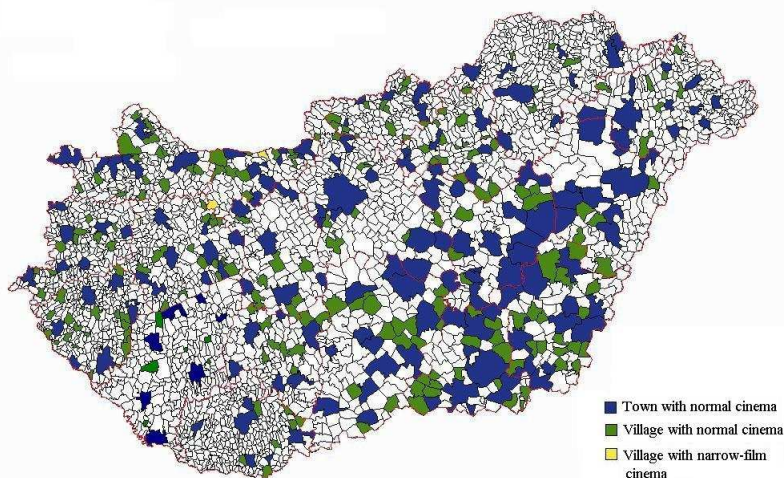
By the mid 1980ies, with the proliferation of crisis symptoms, the tendency turned into its opposite, mainly due to the shut down of provincial 35 mm cinemas. Between 1985 and 1990 the normal cinema network suffered a decrease of 8.4 %.

The socio-economic processes in the years following the change of the regime (the increase of inflation, the restructuring of the population's consumer habits, the changes in the subsidy system, the handing over of state properties to the local governments) accelerated the pace of diminution in the number of normal

cinemas. The measure of reduction was nearly doubled compared to the period of 1985-90. Towns without cinema appeared. By the end of 1995 the number of normal cinemas recorded in the statistics slid back to the 1938 level.

As by the end of 1995 narrow cinema practically ceased to exist, large continuous areas in the country, including towns and villages were left without the classic transmission instrument of film. The texture of the cinema network which in the 1960ies still covered almost the whole country became notably scarce (Figure 3).

Figure 3 Spatial network of the settlements having active cinema in 1995



Source: The author's own drawing based on data of HMCE

In those country areas predominantly composed of tiny villages, and in the developing agglomerations it became almost entirely empty. Full supply existed only in towns with a population above 50 thousand. It underlines the final result, that by then only 65.6% of the country's population, 57.7 % of the rural population could go to cinema in their own dwelling places.

The dissertation lays great emphasis on the examination of the reasons that caused the shrinkage of the network between 1960 and 1995. It ascertains that the process is a result of complex effect mechanisms. It ascribes decisive role to the general socio-economic environment. Furthermore it highlights the effect of the television's diffusion, the causes originating in the organizational frames of cinema operation, in development policy, and in the paradigm shift of film distribution, it analysis the attitude of control and professional direction.

4.5. The Hungarian cinema network in the years of the millennium (from 1996 until nowadays)

The period between 1996 until today could be considered as a single phase in the examination of the domestic cinema network's evolution, of which the two main characteristics are the further reduction of traditional cinemas, and the appearance and expansion of multi screen cinemas, primarily of multiplexes in shopping centers. One of the events – deemed as most significant – of the motion picture trade, the birth of the motion picture law in 2004 after almost one and a half decade of preparation, marks out however some sort of borderlines.

Before the motion picture law came into effect, the processes resulted in an imbalanced network coming into existence with a deformed spatial structure, which had the following characteristics:

- In the decline of normal cinemas the injured were mostly again the villages. In this period the number of villages with cinema fell back from 7.1 % to 2.9 % (from 207 to 85).

- In spite of the increasing proportion of urban movie theatres, the number of towns having cinema considerably decreased, from the 80 % in 1995 to 46.8 % by 2003. The practice of town rank qualification of towns also played a role in the change. Namely, in some of the newly qualified settlements there was no cinema already at the time of the promotion (e.g. Elek, Létavértes, Devecser, Újszász, Borsodnádásd etc.).

- With the appearance of multiplexes, the number of seats significantly grew in the towns of county rank (Sopron, Székesfehérvár, Győr, Szeged, Szombathely, Zalaegerszeg). Where no shopping centers were built (Eger, Hódmezővásárhely, Szekszárd), an opposite process took place.

- The 355 provincial screening rooms were concentrated in 250 cinemas and in 215 settlements with different density and index of supply in each region, county and micro-region. Uninterrupted large areas lacking cinema were created in South Transdanubia and in the counties of Borsod-Abaúj-Zemplén and Jász-Nagykun-Szolnok, intensifying the - in these areas, though in different ways but already existing - economic, social and cultural disadvantages.

The motion picture law enacted in 2004, despite all its positive aspects could not meet every expectation of the film trade, which was strongly divided by different interests. At the expense of treating some problems of the profession, besides assigning a significant role to the state, it induced new tensions:

- In the center of regulation stands the state's role taking in the fields of film production, its scope is limited to the circle of the so-called art movies, which makes up only two or three dozen out of the cinema range. It discriminates projection places with mixed program structure, which actually represent the spine of the network, therefore it results in a social division in the consumption of cultural goods, rooting in local and regional specifications.

- The subsidy system does not imply any value preference in the production and distribution of Hungarian films. Even the most wretched product is entitled to direct and normative subsidies. However the movies not labeled as art cinema, do not receive any subvention for Hungarian films, apart from the rare exception of some occasions related to film programs.

- The central budget granted nearly one milliard forints for the improvement of the domestic art network between 2003 and 2006. The goal of the tenders was to create an opportunity – as an alternative to the multiplexes – for satisfying other kind of viewer demands. Those local governments could receive a share of the funds, which undertook the foundation of art cinemas, and granted for 5 years after the realization of the investment the operation of the beneficiary establishment as an art movie. It must have resulted from the methodology of the tenders' arrangement that from nearly one third of the beneficiary authorities (from 15 towns) despite their pledge none of the cinemas got itself registered as art movie until the third quarter of 2008.

- The network set up is strongly capital-centered, its spatial dispersion is rather disproportionate. In two counties (Nógrád and Somogy) there was no functioning art cinema at all, in the county of Győr-Moson-Sopron in 4 settlements 5 cinemas, and their 7 screening rooms belonged to the network. Out of the towns with county rank only 14 (60.1%) had art projection places. Among the county seats 6 (Kaposvár, Kecskemét, Salgótarján, Székesfehérvár, Tatabánya, Veszprém) had no movie theatre belonging to the beneficiary group.

In the after-film-law phase – in spite of the progressive decrease in the number of viewers – the expansion of multi-room cinemas in shopping centers continued. The improvements were carried out when – as a result of oversupply and recession – the two until then dominant cinema operators and film distributors, the pioneers of multi-room cinemas in Hungary, sold their multiplexes.

By the end of the year the spatial imbalance of the evolved network grew further. The movie theatre abandoned larger and larger areas, even of a county's size (Figure 4):

- In the whole South Transdanubia there were 10 projection places (in 1 town of Somogy, in 3 towns of Baranya, in 5 towns and in 1 community of Tolna)

- In the western part of the Northern Hungary (the northern part of Heves, Nógrád and Pest counties) merely 3 towns (Eger, Balassagyarmat és Szécsény) could take pride in this element of cultural infrastructure.

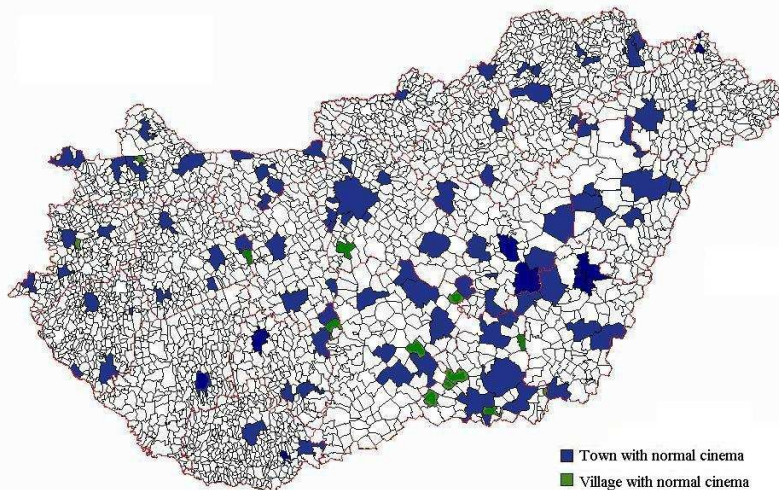
- The Nyírség, Szatmár and Bereg areas of the country situated to the east of Nyíregyháza, belong also to the regions deficient in cinemas

- Bigger, density centre like areas can be found only in the Great Plain region.

By the end of the first decade of the new Millennium cinema became the typical institution of the highest levels of settlement hierarchy. The *capital-centered* characteristic intensified, our *regional centers* have a large variety of networks (multiplex, traditional, and alternative film theaters). *In our county seats* the image is humbler yet. In the level of supply we find big differences among

settlements. The art cinema, art screening room is not a typical phenomenon any more in this settlement category.

Figure 4 Spatial network of the settlements having active cinema in the end of 2007



Source: The author's own drawing based on data of NFO

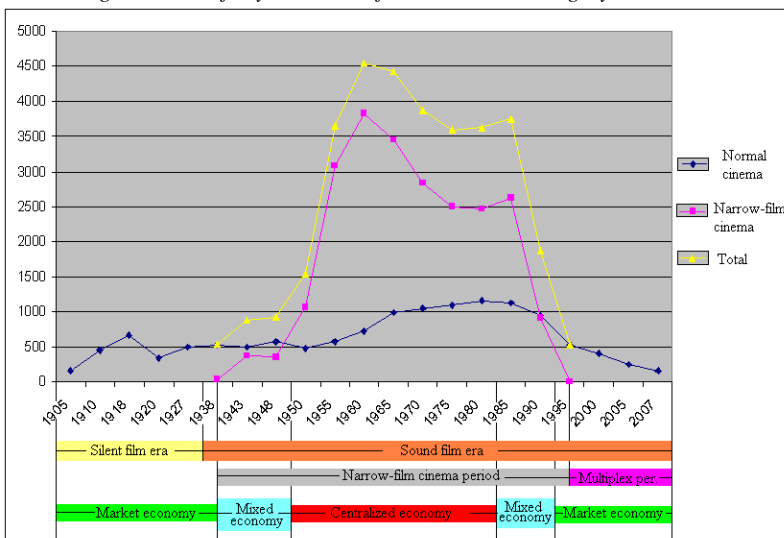
More than one third (36 %) of our *middle-sized towns* belonged already to the category of deficient in institutions. A typical establishment is the monoscreen cinema. The network of these towns is much more vulnerable than those on higher levels of the hierarchy. The cultural infrastructure of our *small towns* in 2007 was lacking for cinema in general, altogether 28 % of them had cinema at the end of the year. The projection units are typically monoscreen establishments. Their network is the most vulnerable. Their share of the subsidies is just crumbs around the table, many of the distributors hardly consider them business partners because of their low technical level, and profit-producing capacity. A cinema in Hungarian *villages* is deemed as a curiosity. Out of the group constituting the 90.5 % of the country's settlement strength, - where the 37.5 % of Hungarian population lived in 2007 - there were projections only in 14. These cinemas do not have access to state subventions, their future is unpredictable.

4.6. The life cycle model of the diffusion of cinema in Hungary

Reviewing the course of cinema in Hungary a quite easy-to-model picture takes shape, expressive also on graphics (Figure 5).

The innovation appeared at the end of the 19th century has two epochs. The *silent film era* represents the beginning, which is a basic innovation of recording and reproducing motion, as many times as we wish. In the first period of the silent film phase (in the time of its appearance, and of the first practical applications) we can not talk about cinema as a professional establishment. Travelling cinemas projected with a showman's operation license for shorter or longer periods the prints they had, at some serviceable premises of a settlement.

Figure 5 The life cycle model of the cinema in Hungary 1905-2007



Source: The author's own calculation and drawing

At the beginning of the 20th century – due to the professionalization of film trade – cinema was institutionalized. Its development synchronized with the European trends was broken by the First World War and the Treaty of Versailles declaring the end of it.

The first period, which took place clearly in market economic circumstances, can be characterized by rapid changes in quantity. The quantitative decline perceived in the meanwhile was a result of the country's territory shrinking by two thirds.

Innovating the already set up cinema network, and concluding the first epoch, the *sound film* appeared on the turn of the 1920-30ies. This means the beginning of the *second phase* lasting up to now, the epoch of sound film technique of motion picture projection. The speed of the increase that followed the temporary stagnation due to the switch to sound film was multiplied by the

innovation supported and introduced by the state at the end of the 1930ies, the 16 mm narrow gauge film.

This period, opening the narrow gauge phase, was not any more clearly dominated by market economic conditions. The country - preparing for war - had a mixed system of war time economy, incorporating both centralized and market oriented characteristics.

The new technique licensed for providing supply in villages – after the repeated break and social trauma caused by the Second World War – became the number one tool of the innovation politics of the - by the political shift sanctified - centralized economy. The process can not be construed any more according to the classic model of innovation diffusion. The core areas can not be defined, the process is reversed, the expansion starts from rural places and moves in the direction of much more developed urban areas.

The impetus of realizing the political goal – the development of the network to total coverage – was broken on the turn of the 1960ies as a result of the rapid spread of television. The intensive phase succeeding the extensive phase – besides the shrinkage, but unchanged dominance of the narrow film network – though results in the growing of the normal (35 mm) network, and in the improvement of its comfort level, but it can not stop or slow down the absorption effect of the new rival technique, the television. There is no better evidence of the determined competition between the two than the fact that in 1985, when the program time of the Hungarian Television was limited by closing the broadcasting at 10 pm – with reference to cost-saving reasons – cinema operation reacted immediately. The temporarily pausing or already closed units open their gates, the number of migrant cinemas raises, and in bigger towns so-called night showings are presented, beginning late in the evening. The phenomenon is well illustrated by the inflexion point of the life cycle curve and the second breakpoint in it.

As the social, political and economic crises became already obvious in the mid 1980ies, the governance's seeking a way out, the inevitable loosening of centralized economy, the allowing of some market economy elements to enter the existing system, resulted in a mixed economy. The intensification of market mechanisms brought about the rapid receding of the – by low technical, infrastructural and comfort level characterized, and by political will overdeveloped – network. The governing power started to back out from behind the cinemas already in the preparation phase for the political transformation.

The effect of the shift to market economy until the mid 1990ies was enhanced by the launching of the local television programming services, and the speedy popularization of home videos. From the freely usable timeframe of social timebase – and within that, from the time spent in cinema – these techniques tore out always more.

In the time of stabilized market economy conditions by the second half of the 1990ies, the classic cinema network – already collapsed to pieces due to the transfer of property – had to / has to compete with extra- and intra-system motion picture transmitting structures, with the multiplexes and with the internet in the

new millennium. In this competition the state subvention granted by the film law – which came into existence rather late in comparison to the actual changes – does not seem to be an effective instrument yet. The innovation behavior model typical for market economy has resumed. The recent innovations of motion picture transmission – as there is no redistributable freely usable social timebase being released – do not endeavor to cooperate complementing each other any more, but they aspire to oust each other from the market.

4.7. The social problems originating from the present state of the cinema network

The changed social relations system regarding cinema can have and do have socio-political consequences beyond the narrow circles of the film trade.

- The document titled “The directions of cultural modernization” – determining the long-term improvement of the branch – establishes: “One of the objectives of cultural politics is the creation of equal cultural opportunities – in both geographical and social sense –, the granting of access to cultural goods and to cultural variety.

The country was divided in two parts by the turn of the millennium, regarding the opportunity for civilized pastime offered by the cinemas. This division exists not only between urbanized and rural areas, but also among towns. The present conditions strongly divide the Hungarian population’s equal opportunities to culture. There will be some who can pick and choose from the oversupply, some who can access this cultural service at the price of smaller or bigger sacrifices in time and money, and there will be some who will have to do without it.

- A further problem can be that steadily unsatisfied needs – due to the characteristic of human psyche - cease to exist beyond a certain tolerance level, after a while their place will be taken by other needs, the desire for cinema also fades away, and dies.

- The territorial characteristics of the cinema network raise doubts about the complete feasibility of the National Core Curriculum’s pedagogical task system in the fields of motion picture and media in a considerable part of the institutional network of public education.

- The motion picture law came into force in 2004 and its execution did not essentially influence the real processes. As a consequence of the art movies’ developments, the deformed spatial structure of the network did not change at all. The falling behind of the cinemas in small end medium-sized towns – considering their technical, infrastructural and comfort level – continued, their market positions are gradually deteriorating.

- Perhaps there will be a prospering Hungarian film production due to the significant subsidies, but only a tiny minority of the population will have access to its products.

- The cultural governance has no decisive influence on the real processes. In spite of the obvious oversaturation significant multiplex investments were realized in the second half of the decade.

- The example of the narrow-film cinema network admonishes rightfully, that an innovation or innovation program overdeveloped or over preferred by the inventions of the governing power and of politics, by the weakening of the political or state will, by the changes in the preferences discontinues, can cease to exist. The extension of its lifespan as well as its introduction to practice – depending on the market mechanisms – puts superfluous burdens on both central and local budgets.

5. Conclusion. Possible use of the research findings and further research directions

The most important output of the research is that it sketched out comprehensively the – about hundred and ten years long, from the beginning until nowadays lasting – life cycle of the cinema, the instrument of social communication with periodically varying importance, intensity and function. In its course it carried out also the comparison to the international trends.

It took a survey of the complex (social, economic, political and professional) motive system of macro-processes.

It presented the space-specific characteristics of the changes, the pace of appearance, diffusion and receding, its grade of territorial organization on both the formal and functional levels. On the phase borders it vividly demonstrated by graphics the positions of cinema in transmitting culture, the proportion of the population having access to the service, and also the efficiency of the network in the case of adequate data being available.

It summarized the general characteristics of movies in different settlement types, occasionally with reference to typical and atypical phenomena (e.g. Bölcse, Eger, Sopron, Békéscsaba).

In relation to these facts, we can define one of the directions of further development, the – as much as possible – in depth exploration – touching upon both strict and relaxed conditions in the social sense – and local and regional interpretation of the reasons for typical and atypical phenomena. The reason for this is that in the basic, preparatory phase of the research, the mere aim was the exploration and analysis of macro-processes.

The dissertation evaluated the real processes sketched out, from the aspect of innovation theory and innovation-geography as well. It pointed out the peculiarities of the diffusion of cinema, as a technical and cultural innovation, under different social and economic circumstances (centralized, mixed and market economy). Illustrated also by other examples, it drew the attention to the vague position of innovations over preferred or labeled as omnipotent by the governing power.

As a summary it outlined the innovation-theory life-cycle curve of narrow-film cinema and the complex model of the cinema's entire life cycle so far.

This range of innovation theory may imply the other main direction of further researches, namely the examination and analysis of the diffusion of innovations – primarily those competing with each other – with equal or similar functions. Limited only to the film trade, this area could be the cinema, the e-cinema and the internet cinema.

There are several possible fields to utilize the dissertation, the research, according to the author's intention:

- For the reason of the unconcealed niche-filling intention, it can bring new colors into the research areas conquered by cultural geography so far.
- By the thematic taken, it can set a new direction in the domestic cultivation of a new geographical discipline, the geography of cinema emerged from Anglo-Saxon and German geography, comprising besides the software (the film itself) also the hardware (the transmission system).
- The lessons that can be drawn from the diffusion and destiny of cinema as an innovation, could be utilized in the fields of settlement planning and organizing, in the daily practice of the governing authorities (e.g. regarding building and culture), in the creation of various professional development policies and programs.
- The dissertation could contribute to the establishing of a new kind of subsidy system in film trade, mitigating the presented dichotomies, and to the dissolving of preference distortions among the different branches of film trade. With special regards to avoiding that the DCI's (the Digital Cinema Initiatives from Hollywood, keeping traditional film distribution under great pressure) breaking into the Hungarian market would cause further sacrifices, and the demolition of existing values. In February 2008 the guild of German art cinemas (Arbeitsgemeinschaft Kino – Gilde deutscher Filmkunsttheater e.V.) urged the elaboration of a national program against this very foreseeable process in their proclamation (Many Cinemas for German Film!) issued at the Berlin Film Festival.
- An important field of utilization can be education. A rather neglected area of the professional training in motion picture is the cinema chapter of media history. At the same time the results of the research – according to the hopes of the dissertator – may as well provide useful additional material in different studies of geography (cultural and historical geography, and the geography of innovation) for those having great affinity towards certain social phenomena.

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