

# Mapping Landscapes in Transformation

## Multidisciplinary Methods for Historical Analysis

Edited by

Thomas Coomans, Bieke Cattoor, and Krista De Jonge

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Thomas Coomans, Bieke Cattoor & Krista De Jonge

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### POSTFACE

Mapping Historical Landscapes in Transformation: An Overview  
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## 6.

# Photography, Railways and Landscape in Transylvania, Romania

## Case Studies in Digital Humanities

Cristina Purcar (Technical University Cluj-Napoca)

‘An idea, not a thing,’ landscape is the cultural perception of the physical environment, ‘created by our minds and emotions’ (Clark et al. 2003: 3). The environment as physical place and the landscape as culturally determined perception and representation of the physical place, therefore, form a complex unity. Among the different representations of the environment (or landscape-construction means), cartography and statistics are allegedly more objective, while photography, painting, and literature provide rather subjective readings. Through mapping, contemporary geo-positioned data-management tools allow for a multi-layered relatedness between these two components of landscape.

Through mapping, this paper investigates the triple relationship between photography, railway, and landscape. Hereby, mapping is understood as the associative operation that topologically connects sets of iconographic data to cartographical sets, more specifically in this study, historic railway photography to contemporary and historic cartography. Railways and photography appeared at the same time, around 1830. Both are mechanical technologies and industrial media: a medium for transportation and a medium for the creation of images respectively. Both railways and photography ushered in a modern understanding of space and time, a new awareness of, and relationship with, landscape. Railways reshaped places, indeed entire territories, while landscape photography created a visual discourse about these transformations, often apologetic, sometimes evasive, and sometimes critical.

How should one read, analyse, and interpret this peculiar object, railway, and the landscapes it formed and transformed? In this study we argue that historic

photography, investigated as a coherent body of images, *corpus photographi-cum*, rather than as individual images, can prove an effective means to this end. Focusing on railway cases from Transylvania, Romania, we propose a mapping system wherein mapping is understood more as in mathematical linguistics — as associative operation between different data sets — rather than as in cartography proper, as the creation of graphic representations of parts of the Earth's surface. A system is proposed of interconnected geo-located data, using the photographic image as an entrance gate to a multi-layered investigation of change in the railway landscape, or as a nexus around which diverse types of historic documents may revolve and confront each other.

## Photography and the railway landscape

Remarkably, the development of railway and photography, both icons of modernity, unfolded in parallel: as railways spread their net across the continents, making mobility more accessible than ever before, photography became a mass media, especially in the form of postcards and printed-press illustrations. By the late 1850s, the major European railway trunk lines were in place or under construction, while photographers' studios were functioning in all major cities. After 1870, the practice of publishing, posting, and collecting postcards proliferated, with Austria as the first country to introduce postal cards in 1869 and picture postcards after the 1880s (Carline 1971: 37-38). Imaged postcards quickly gained enormous popularity and were promoted by central administrations as tokens of democratic governance, providing large population strata with affordable access to communication and information (Thirkell and Scullion 2004: 6-13). Simultaneously, the railways were expected to provide democratic access to mobility and work, business, but leisure railway travel also flourished between the last quarter of the nineteenth century and the outbreak of WWI.

By the early twentieth century, topographic photography, mass printed and distributed in the form of picture postcards, became virtually ubiquitous and place-postcard collection a popular hobby among the Dualist Empire middle classes (Degen n.d.). The railways were not only a crucial favouring factor, but also an important picture-postcard subject in their own right. Photographers used the railways for their photographing travels, but also frequently pictured the railways; travellers used the railway system to reach daily or exceptional destinations, but also sent images thereof via a postal system which was tightly related to and dependent on the railway system. Indeed, both railway travel and topographic

postcard culture are essential ingredients for the emergence of an idealised collective image of the *Belle Époque*.

In Transylvania, the north-western part of present-day Romania and part of the Austro-Hungarian Empire at the time, the first railway lines (Arad – Alba Iulia and Oradea – Cluj – Braşov) were open for traffic by 1873. During the same period, pioneer photographers opened and led successful photographic practices, such as Ferenc Veress (1832-1916) in Cluj since 1853 or Leopold Adler (1848-1924) in Braşov since 1870. A highly substantial contribution to the dissemination, often also to the creation of documentary photography belonged to the postcard publishers, who flourished around 1900. In Braşov they were Zeidner, Hiemesch, Müller, Ciurcu, Samu, Gust, Lang, or Netolitscha (Căncescu 2008: 8-9).

The railway project devised a self-coherent territorial-scale construction, tackling a multitude of spatial planning scales: the overall line trajectory; the insertion within the countryside topography; the by-passing of settlements and the location of stations within the urban fabric; the layout and architectural expression of stations and works of engineering art (Purcar 2007). As a result, the regions traversed by the railway contain this ‘built-in’ territorial structure, sometimes still perceivable, sometimes eclipsed or partly erased by subsequent developments, a genuine territorial-scale palimpsest. The railway territory is defined by its backbone rather than by boundaries, because boundaries shift according to which scale-level of the railway project is brought into discussion. As already argued, addressing the railway infrastructure from a landscape historical perspective provides a unique territorial ‘stratigraphy’ that correlates — and could be used to reconcile — the tensions between network and place, town and region, the pastoral and the industrial, nature and culture, conservation and renewal (Purcar 2009b: 10). In the early days, railway photography was intended for advertising and documentation purposes, with the intention of depicting triumphant, progressive visions. By doing this, railway photographs naturally captured fragments of the urban/rural environments, thus also documenting, albeit rather not purposefully, the neighbouring places which would undergo, for better or for worse, the ineluctable influence of this new force line of the territory.

Consequently, there exists today a rich heritage of railway images, in the form of genuine photographs and postcards, scattered in the collections of public libraries, in deltiologist collections, (local) historical monographs or blogs, railway-fan sites, in physical or digital form and with different degrees of alphabetic, chronologic, and/or thematic/key-word systematisation.

A case in point, Cluj-based photographer Ferenc Veress sent images for the 1873 World Exhibition in Vienna, just after the inauguration of the Transylvanian trunk lines — the backbone of the regional railway network — that both facilitated his travels and constituted an important subject of his photographs. Károly Kincses mentions Veress applying for a free train pass to allow him to travel from the capital Budapest to the south-eastern border Predeal, in order to systematically photograph sites along the railway (Kincses 1993: 47, cited in Újvári 2014). He was as eager to document these contemporary highlights as the country's historic monuments; in his articles he called on his fellow photographers to join in the task of creating 'a great photographic collection,' being aware of the historic monuments' fragility as well as of photography's documentary power (Veress 1860, *apud* Újvári 2014: 147). Meanwhile, his (railway) images, contemporary with their subject matter, have also acquired the historical value initially grasped in relation to the earlier monuments: they reveal to us, one century later, the railway territory in its original state.

### Mapped images and image maps: a framework for studying change in the railway landscape

Drawing on Transylvanian case studies, this chapter outlines a framework for studying change in the railway landscape, starting from railway photography. Susan Sontag speaks of the photograph as an extension of Baudelaire's middle-class *flâneur's* eye and of the photographer as an 'armed version of the solitary walker' who 'discovers the city as a landscape of voluptuous extremes' (Sontag 2005: 43). Paraphrasing Sontag, the railway *corpus photographicum* reveals the territory as a landscape of contrasts connected by narrative lines, the railway lines. In terms of the collective imagination, railway photography contributes enormously to creating the railway landscape, for railway landscape only exists in as far as it is represented — in this case, photographed. Railway photographs are significant not only for what they show, but also for what they do not. The image of the railway created by the mapped photographs, *i.e.* the railway landscape, overlaps only fragmentarily the railway's cartographic representation.<sup>1</sup> While in cartography the railways are rendered as continuous lines, mapped railway photography reveals an incomplete geography of unevenly dense dotted lines, with concentration hotspots and blank — as if invisible — sections. Constructing the railway landscape through the mass medium of photography appears therefore as a highly selective mapping operation.

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1. Thanks to Karl Beelen for having pinpointed this insight.

In structuring our database we are inspired by Roland Barthes' writings on photography, namely by his two notions, *studium* and *punctum*, which are borrowed and displaced. For Barthes, *studium* represents the cultural attributes of a photograph, allowing for a rational, enthusiastic yet detached reflection on the image, while *punctum* is the irrational, the poignant detail or accident which disquiets the viewer, triggering an intense engagement therewith; by the co-presence of *studium* and *punctum*, the photograph in question acquires a higher value (Barthes 1981: 25-42). Our diversion goes to consider the topographic photograph or postcard as being the *punctum* that touches us, captures our attention, stirring a desire for *studium*, i.e. for exploring the history of the place in question by bringing in other sources, such as cartography, historiography, statistics, etc. Thus a seizing, powerful image becomes the fragment that sets off a search for what is beyond the image itself.

A system of geo-located railway image galleries, connected with cartographic and other, non-iconographic data, can serve both for the chronologic and thematic ordering of railway images, as well as for the study of these images within specific time and space contexts. Currently implemented partially, the designed framework consists of five main image galleries, ordering railway photography according to five species, which are significant for the study of landscape as well, for defining five specific types of railway sites: (1) reception buildings viewed from the city side; (2) views of station yards; (3) tramways or railway lines in the street; (4) railways in industrial sites; (5) railways in the countryside. All images included in galleries are geo-located by being attached to the Google Earth map: they are mapped images. The photos can be accessed either as mapped images, by surfing the map, where their locations are indicated by place markers, or by browsing one of the five thematic galleries, presented as image maps, wherein one can choose whether images are sorted by creation date or by the place-name alphabetical order. The structure and main functions of the database are summarised in the following table.

images are archived as five-type placemarkers on Google Maps or browsed from five MAIN GALLERIES				
(1) RECEPTION BUILDINGS VIEWED FROM THE CITY SIDE	(2) VIEWS OF STATION YARDS	(3) TRAMWAYS / RAILWAY LINES IN THE STREET	(4) RAILWAYS IN INDUSTRIAL SITES	(5) RAILWAYS IN THE COUNTRYSIDE

an image is chosen: *PUNCTUM*

image 'ID': schematic map with image location and geographic coordinates in WGS84; place; viewing position; date; type (medium); source

to each *punctum*, three research contexts are assigned:

*STUDIUM* SUB-GALLERIES

(I) DIACHRONIC PLACE SURVEY studies long-term change at the <i>punctum</i> site	(II) TYPE DECLINATIONS surveys synchronic develop- ments in similar locations, elsewhere	(III) ALONG THE LINE surveys the problematic of the <i>punctum</i> image along the same railway line
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SUB-GALLERY CONTENT

(i) geo-located and calibrated historic or contemporary map with placemarkers	(ii) geo-tagged text / table / audio / video	(iii) geo-tagged photograph a new <i>punctum</i>
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The database not only is devised to present research results so far, but also is an instrument for on-going and future research, by ordering and presenting the currently available material, providing a framework for the study of new documents, and facilitating new insights. Creating multiple interconnections between two different forms of spatial representation — maps and photographs — allows us to construct new space and time narratives, through geo-location, calibration, overlapping, juxtaposition, in and out zooming, etc.

Two examples from the United States could be evoked at this point, along with their specific relevance and differences. The Center for Railroad Photography & Art aims 'to preserve and present significant images of railroading' and 'telling railroading's stories through imagery'. (<http://www.railphoto-art.org/>) It offers links to libraries and documentation centres, organises exhibitions, and publishes books and albums, as well as the trimestral journal *Railway Heritage*. It is a valuable source for studying the history of the US railway landscape, although images are not geo-tagged and the geographical context of imaged places must be researched separately. The railpictures.net portal is another US-focused, partly international, website of geo-tagged railway photographs, which can be sorted according to locomotive type, railway line, country, photographer, keyword, year — but relatively very few images from before 1945 — grouped in several railway-focused categories (such as steam locomotive, tunnels, yards, night shots, snow shots, etc.).

Although the site is neither focused on historic material, nor does it allow for the introduction and geo-referencing of other documentary sources such as historic maps or written documents, it is interesting for being open-access and for connecting image, place, and basic information via GIS.

The following paragraphs present some of the research possibilities offered by each of the five main galleries.

### *Reception buildings viewed from the city side*

During the nineteenth and early twentieth centuries, railway stations were perceived as status symbols of their towns. Not only were they the main entrances thereto, but they also replicated, in a minor scale, the essential urban functions such as public service, commerce, industry, and housing. Publishing images of a town's railway station in the form of postcards was a matter of pride, synecdochically identifying the settlement with its utmost modernity asset [Map 1]. This insight has been memorably expressed by Proust in *Remembrance of Things Past* and recalled by Wolfgang Schivelbusch in his seminal book on railway's cultural impact:

[...] the mysterious operation that is performed in those peculiar places, railway stations, which do not constitute, so to speak, a part of the surrounding town, but contain the essence of its personality, just as upon their signboards they bear its painted name' (Proust 1943: 489-490).

Among the *Belle Époque* railway photography species, the images capturing the urban side of reception buildings and the public interface of railway stations were almost ubiquitous. Commissioned either by the railway companies or the local administrations, it is possible to find such a 'business card' for almost every town endowed with a railway station. Mapping these images configures the regional railway network, prompting a dot-and-line map wherein the reception building photos represent the network nodes. The sub-galleries prompted along with the enlarged photo allow three different types of investigations:

1. Diachronic place survey: studies the chronologic transformations of the railway station and its area at several scales: the building itself; the public space in close proximity — the station square; the adjoining urban fabric — the station's quarter, the station's boulevard.



2. Type declinations: brings forth, as mapped images, contemporary reception buildings belonging to the same category/station class; this is highly valuable when restoration is considered, as very often initially identical buildings suffered different types of transformation in time, a less transformed building may serve as a reference for the original state of a heavily altered one.
3. Along the line/'co-linear' reception buildings: allows the study of all reception buildings serving a specific railway line; this helps to document settlement hierarchy at a certain time, in both territorial-administrative and railway-network terms, the reception building size and elaboration being directly related to the rank within a station-class typology.

### *Tracks inside stations: the railway yards*

Inner views of station yards are another widespread species of early railway photography: often commissioned by the railway companies to document the extension and endowment of stations, they can also be the subjects of post-cards [Map 2]. The view is usually biased towards the reception building and waiting platforms, often a steaming locomotive or train carriages as eye-catchers. Sometimes the view is framed symmetrically, using a railway track as the vertical composition axis of the image, in this case resulting in a balanced presentation of the two sides of the tracks with the passenger or with the train operation-maintenance facilities. Often, the reception-building side of the tracks is shown on the image left, so that it gains more importance, as we tend to 'read' images from left to right. Also, an all-embracing, higher viewpoint is often employed in order to facilitate the descriptive, inventorying attitude of these images.

The three sub-galleries connected to this type of railway image are:

1. Diachronic place survey: documenting, through plans and photos, the time-line transformations of the precinct, such as surface enlargements, line prolongations, edifice replacements and/or transformations, platform covering structures, footbridge crossovers, lighting systems, etc.
2. Type declinations: allows for comparisons between similar station yards: same period, same station class, different/same railway company.
3. Along the line: documents stations along the same railway line according to a station-class hierarchy, in terms of the size and number of their facilities, such as passenger buildings, goods warehouses, water towers, coal sheds, locomotive and carriage sheds, railway employee housing. This is based on historic

documents such as photos and cadastre plans, but also on custom-made graphics illustrating the relationship between station classes and a regional-scale settlement hierarchy.

### *Street lines: historic tramways*

Around 1900, in parallel with the development of the main railway network, local railway lines and tramways were open in the more important Transylvanian towns. They connected the centre with the industrialising suburbs and with the rapidly expanding residential areas, often former villages integrated during the same period within the municipal boundaries of the mother-town. Together with the railway station, the tramway — successively horse-, steam-, diesel-, and electrical-powered — was immediately assumed as an important status symbol of a modern city [Map 3]. This is proved by the numerous historic images of these street trains. The most typical composition places the tram as the image focal point, usually avoiding its geometric centre, in order to potentiate the dynamic character of the photographic *veduta*, as a trope of modernity. Even when the tram itself is absent from the image, the bending or straight tracks, emphasising the street trajectory, remain the image force lines. In some tramline shots the tram and/or the line do not always seem to be the main protagonists, but the tramline streets, rather than other streets, tend to be depicted the most frequently. These streets were the town's hotlines just as the tram stops were its hotspots.

When a tramline view is the selected *punctum* image from the main galleries, the three related sub-galleries are:

1. Diachronic place survey: documents timeline changes of the same urban spot.
2. Type declinations/other *Belle Époque* tramways: allows comparison with contemporary urban tramlines.
3. Along the line/tram-way hotspots: retraces the original trajectory, often completely or partly altered in time, along with the opening and closure dates of the different segments; provides a synchronic selection of the urban landscape in the historic centre, the pericentral districts, as well as in the rural and/or industrial peripheries; it also documents the spatial connections between the local, vicinal and regional railway lines having the city in point as their hub and the dynamic thereof (such as relocated lines and stations).

### *Tracks, mineshafts, furnaces: railways in industrial sites*

A large corpus of late nineteenth-century railway photographs consists in views of industrial sites, wherein tracks are always included. These were intended to document the assets of state and private companies as a matter of pride and as tokens of modernity and prosperity of the state and the companies. Cultivating monumentality and orderliness, the images would also have acted as incentives for shareholders' trust and investment [Map 4]. The powerful, dynamic compositions, foregrounding the neat verticals, horizontals, and diagonals of the industrial buildings and installations are often seconded by the softly blurred, undulating lines of the natural surroundings: a telling overlapping of the two colliding realities in the rapidly growing mining regions, formerly remote, archaic rural places: the pastoral and the industrial (Purcar 2009a).

A special group within this category is formed by post-war photography. Between the 1950s and the 1970s, the intensive industrialisation promoted by the Communist regime was documented with the same propagandistic aims as before. However, monumentality now also acquires a dramatic note: closer, bird's-eye perspectives, more smoke and steam, in contrast with ever stronger force lines of the built masses. Certain views, of the Hunedoara steel works for instance, evoke an industrial sublime, quite reminiscent of the late 1920s photography and painting of the American artist Charles Sheeler (1883-1965) at the Detroit Ford plant. As remarked by Hal Foster, in such images, the industrial process and the industrial landscape appear timeless and natural, matter-of-course, like the succession of seasons through nature (Foster et al. 2007: 222-225).

This image category triggers three types of investigation:

1. Railway, industry, urbanisation/diachronic place survey: analyses the urbanisation process related to the industrialisation of the *punctum* place, displaying diachronic maps, calibrated and geo-located, as well as other geo-located and dated historic photos.
2. Type declinations: surveys and allows comparison between the same type of industrial sites, e.g. mining sites, foundries, mills, etc.
3. Along the line/industrial region: maps and documents the other components of the industrial system to which the selected site belongs, together with the railway connections that made the system possible.

## *The 'machine in the garden': railways in the countryside*

In *The Machine in the Garden ...*, Leo Marx notices the long-lasting vitality of the pastoral myth in the American culture, in spite of, or perhaps just because of the force of industrialisation. He explains this by the fact that 'the pastoral ideal has been incorporated in a powerful metaphor of contradiction' through its encounter with the 'counterforce' represented by industrialisation (Marx 1964: 4; Purcar 2009a). A large family of railway photography, consisting in track (and train) views within a natural or agricultural context — more often than not focusing on engineering art works such as trenches, tunnels, bridges, viaducts — can be read as illustrations of Marx's 'metaphor of contradiction', much like the above views of industries within pristine natural contexts [Map 5]. Railway construction images, documenting the freshly-cut earth or still scaffolded bridges, spectacular viaducts, light at the end of a tunnel, or mysterious tunnel entrances, but also mediaeval monuments or remarkable natural spots as viewed from the train, were created, published, and collected as symbols of progress and taming of nature by civilisation.

The 'machine in the garden' sub-galleries bring up the following three themes of inquiry:

1. Diachronic place survey: highlights permanence and change about the depicted railway structures and around the spot; these range from replacements and modernisation, trajectory changes, to closure and dismantling of industrial lines, but also to 'heritagisation' and 'touristification' of narrow-gauge forestry lines.
2. Type declinations: surveys similar engineering artworks or similar places in contemporary views.
3. Along the line: documents and characterises, possibly together with written travel accounts, landscapes of the same railway line according to landscape character sequences; highlights landscape change at the level of sequences, both as the railway was constructed and in time.

## Conclusion

'As Wittgenstein argued for words, that the meaning is the use — so for each photograph', notes Susan Sontag in her famous critique of photography (Sontag 2005: 82-83). Clearly, the ambivalence of photography between the act of recording a disappearing reality and the implicit sanctioning of the processes which cause

that very disappearing, remains open: '[f]rom the start, photographers not only set themselves the task of recording a disappearing world but were so employed by those hastening its disappearance' (Sontag 2005: 59). Warning that 'an image-world is replacing the real one', Sontag concludes with the need for an ecology of images if 'there can be a better way for the real world to include the one of images' (Sontag 2005: 120 and 141).

Could an ordering system, a digital memory theatre based on photography, make even a small contribution towards responsibly using and relevantly ordering the ever-growing clouds of past and present photographic imagery? This chapter suggests that an open-ended, dynamic relatedness between maps and photographs — centred each time on one photograph as *punctum*, the interest-catcher, then contextualised through *studium* using maps, as well as other pictures and data — can cross-fertilise the intertwined histories of landscape photography and railway landscape. It can provide a friendly yet structured approach that could benefit historic research, planning, teaching, but also public-awareness raising. Finally, exploring the multi-scale railway territories by dynamically relating the historic documents to models of the present-day environment occasions a more in-depth understanding of the railway's potential of generating, but also of *re-generating* the landscape.

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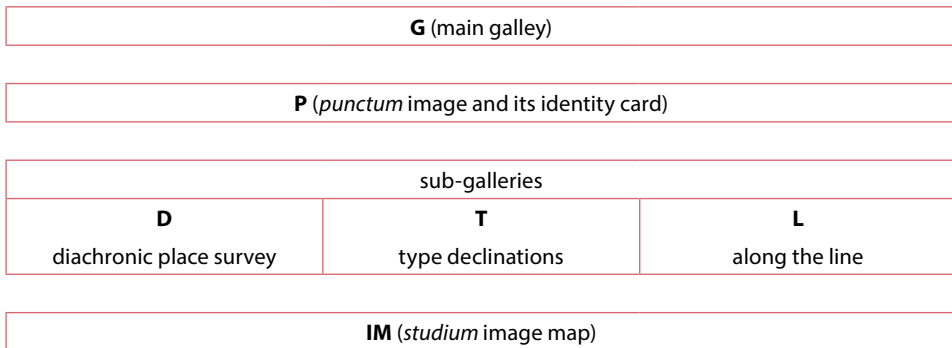
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# Maps

## Introduction

The five graphics presented in this chapter illustrate a system of interconnected geo-located data that uses the photographic image as a portal towards beginning a multi-layered investigation of change in the railway landscape, or as a nexus around which diverse types of historic documents may revolve and confront each other. The database is structured into five main image galleries and several sub-galleries. Diverting Roland Barthes' twin notions — *studium* and *punctum* — we consider the topographic photograph or the topographic postcard as the eye-catcher, the *punctum* that touches us, stirs our interest and the subsequent *studium*, i.e. exploring landscape history by bringing in other sources (Barthes 1993: 25-42). The database is destined not only to present research results, but also as an instrument for on-going, collaborative research.

Diagrammatically, each of the five graphics is structured in four rows as follows:



The proposed framework consists in five main image galleries (first row of each image), grouping railway photography according to five species. **G** [Map 1] G1: reception buildings viewed from the city side; [Map 2] G2: views of station yards; [Map 3] G3: tramways or railway lines in the street; [Map 4] G4: railways in industrial sites; [Map 5] G5: railways in the countryside. All images included in galleries are geo-located in Google Earth and can be accessed either as mapped images or by browsing one of the five thematic galleries. As an image is clicked on — the *punctum* image, **P** (second row) — the photo is displayed in full size, along with a set of attached data: (a) a small schematic map of the Transylvanian railway network showing the location and the geographic coordinates in WGS84; (b) the image 'identity card'; (c) three icons linking to three sub-galleries

related to the image under discussion. To each image of the five main galleries three sub-galleries correspond (third row): **D** diachronic place survey — changes of the same spot, in time; **T**: type declinations — similar space, elsewhere; **L**: along the line — same topic explored along the rest of the same railway line. As a sub-gallery icon is chosen, one is presented with an image-map collage of thematically related images, **IM** (lower group of images). By clicking any of the image map sectors, the corresponding document pops up enlarged: (i) if it is a text or table, it can be read and it may link to other related items; (ii) if it is a photograph, the same set of attached data as for the *punctum* image is displayed (see above); (iii) if it is a map or plan, one is directed to a calibrated map overlapped with the corresponding area in Google Earth.

Unless stated differently, all photographs are postcards from the collections of the Cluj County Library (BJC) or of the Cluj Central University Library (BCU).

**Map 1:** Cristina Purcar, *Reception Buildings Viewed from the City Side*. [From left to right: Brad c.1950, Braşov c.1900, Arad c.1910, Cluj c.1910, Oradea c.1910. **P**: Arad. The railway station. Reception building. Arch. Lajos Szantay. South-west façade. Undated antebellum postcard, after 1910. **D**: Arad before 1910. Arad c.1960. **T**: Timișoara; mapped locations of the other first class reception buildings of the early twentieth century in Transylvania. **L**: Alba Iulia reception building, endpoint of the railway from Arad, the First Transylvanian Railway line, open in 1868. Façade towards lines; façade towards the city. ACFR Timișoara. **IM**, upper row, left to right: Arad, first station; reception building, open 1858; south-west façade; north view. Arad, first station; reception building, open 1858; south-west façade; south view. lower row, left to right: Arad, cadastre map of the railway station insertion in the existing urban fabric in 1858. ACFR Timișoara. Arad, development of the urban structure after the railway advent: 1858; before WWI; interwar period; c.2000 (Purcar 2009b). City plan before WWI. Arad History Museum. Interwar and 1960s reception building views].



During the nineteenth and early twentieth centuries, railway stations were perceived as status symbols of their towns. Not only were they the main entrances thereto, but they also replicated, in a minor scale, the essential urban functions such as public service, commerce, industry, and housing. Synecdochically identifying the settlement with its foremost modernity asset, publishing images of a town's railway station in the form of postcards was a matter of pride, as late as the 1960s-70s, emphasis being placed as much on the square organisation as on the building itself.

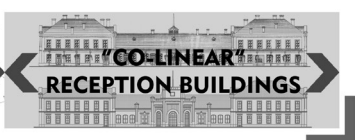
The railway arrived in Arad from Budapest (via Szolnok) in 1858. Positioned obliquely at the crossroads that gave the town its commercial and strategic importance, the station plot was inserted with an eye on the line's subsequent eastward prolongation. The railway station was situated remotely from the town's increasingly dense historic core, on the other side of the water canal, being therefore more part of the rural realm than part of the town proper. However, its siting at a major country road crossing turned this marginal station into the symbolic and visual northern entrance to the city. The railway line started being incorporated into the urban fabric by the end of the nineteenth century, where the so-called 'new quarter' developed by filling the empty area left between station and town; as the station was a terminus between 1858 and 1868, the new quarter could easily expand beyond the tracks as well. During the twentieth century, Arad grew constantly, mainly due to its intensive industrialisation. Industrial and (railway) worker residential areas developed — always depending on each other — on both sides of the tracks, during both the interwar and socialist periods. The replacement of the original reception building by a much larger one in brick at the turn of the twentieth century is symptomatic of this development. The apparent-brick Neo-Renaissance-style edifice celebrates industrialisation as progress, a contemporary Renaissance, replacing the Gothic-Romanticist-style initial building. During the 1960s-1970s, increased density and some commercial functions were introduced by the insertion of middle and high rise apartment blocks, in the attempt to produce a public space with more centre-like qualities. Captured by each succeeding period postcards, the station square atmosphere is rendered such as to suggest dynamism and prosperity, with the reception building always assuming the lion's share therein. Indeed, the other fronts of the square are almost never looked at. Landscape, as constructed collective image of the environment, is thus defined selectively, highlighting some parts while eluding others.



WGS84  
34T  
525033.00 m E  
5115177.00 m N

**ARAD**

The railway station. Reception building.  
Arch. Lajos Szantay. South-west facade.  
Undated postcard, after 1910.



**Map 1:** Reception Buildings Viewed from the City Side.

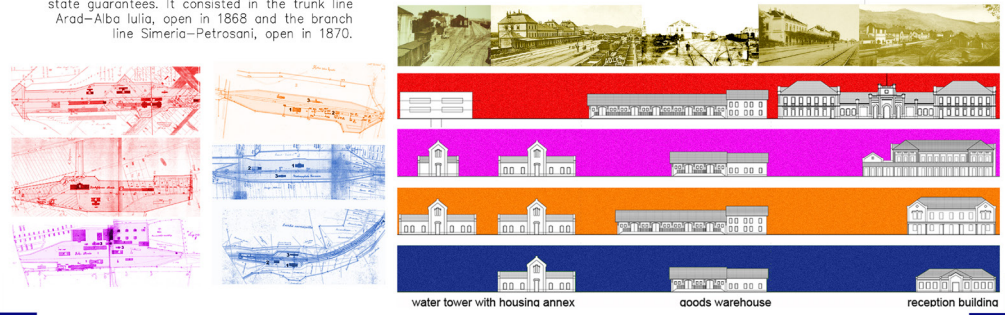
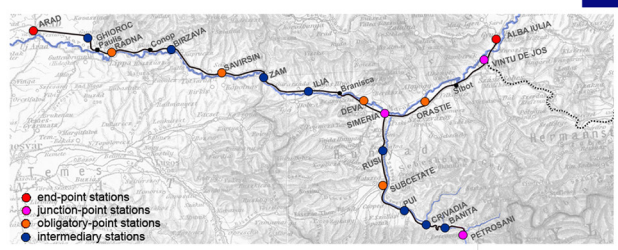
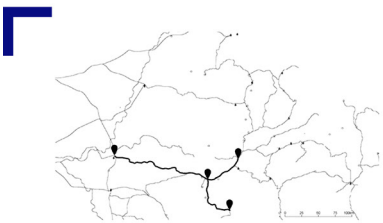
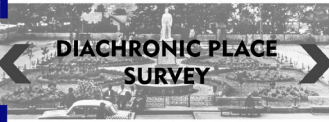
**Map 2:** Cristina Purcar, *Tracks inside Stations: the Railway Yards*. [From left to right: Cluj before WWI. Tuşnad interwar. Petroşani c1920s. Oradea before WWI. Braşov interwar. **P:** Petroşani. The railway station. South view. Undated interwar postcard. BCU Cluj. **D:** Petroşani, station square, view from east. c1960s. **T:** Kassa, in Hungary. **L:** Arad before 1910; Arad before WWI. **IM**, upper row, left to right: trajectory and end stations of the First Transylvanian Railway (FTR) — trunk line Arad—Alba Iulia, branch line Simeria—Petroşani. Mapped station class hierarchy. Lower row, left to right: cadastral plans of station classes along the FTR. ACFR Timişoara and OJC Cluj. Postcard images of main FTR stations: Arad, Simeria, Alba Iulia, Petroşani. Schematic façades of the FTR station facilities: water reservoirs with housing annexes, goods warehouses with housing, reception buildings].

Inner views of station yards are another widespread species of early railway photography: often commissioned by the railway companies to document the extension and endowment of stations, they can also be the subjects of postcards. The view is usually biased towards the reception building and waiting platforms, often a steaming locomotive or train carriages as eye-catchers. Also, an all-embracing, higher viewpoint is often employed, in order to facilitate the descriptive, inventorying mood of these images.

Buildings and installations required by the railway ensemble were generally conceived according to type projects. Given that type projects were employed for the most representative edifices — the reception buildings — they would naturally be employed for the technical premises as well. If 'objective' representations, such as the cadastral plans, reflect these types of projects indiscriminately, the interior landscape of railway yards is only captured selectively by photography. From the five-class station hierarchy along the First Transylvanian Railway, only the first two classes, end-point stations and junction-point stations (red and magenta dots respectively on IM map) can be documented through historic postcards or military photography. When the small halt of Cetatea Bolii is exceptionally photographed (Map 5, IM, left column, middle), rather than highlighting the railway built structures proper, as the other images of this 'family' do, this is due to the spot's rocky character and the desire to show the victory-over-nature of the railway construction endeavour that literally had to cut through mountains. In Map 2, the *punctum* image shows the railway station in Petroşani shortly after WW1, with the turntable and locomotive sheds in the right foreground and with the water reservoir and administrative buildings on the left. Far left, the reception building and its canopy can also be glimpsed. Such wide-angle views encompass the railway station's yard in its entire span, proudly attempting to capture the assets of the railway, especially in a town that actually owed its rapid growth to the railway advent in 1870 and the consequent boom of coal mining in the area.



**PETROSANI**  
The railway station. South view.  
Undated, interbellum postcard.  
BCU Cluj.



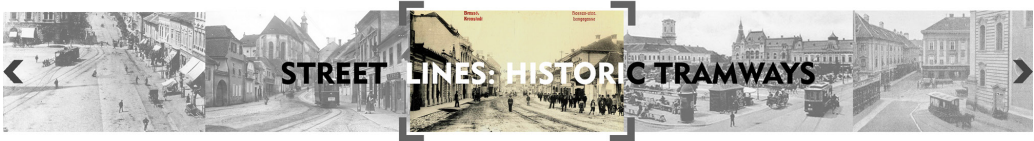
**Map 2:** Tracks inside Stations: the Railway Yards.



**Map 3:** Cristina Purcar, *Street Lines: Historic Tramways*. [From left to right: Cluj, main square. Sibiu, Gen. Magheru str. Braşov, Lungă str. Oradea, main square. Timișoara. **P:** Braşov. Lungă str. Undated postcard, BCU Cluj. **D:** Braşov, Lungă str. City plan c.1915. Braşov, Lungă str. Undated, interwar postcard. **T:** Sibiu, city centre tramway views. **L:** Braşov, tram station 'Promenade', undated postcard, before WWI. Braşov, tramline in the main square, interwar photo. **IM** Map: Braşov. magenta line: trunk railway lines, northwards to Cluj (open 1873), southwards to Predeal and Bucharest (open 1879). yellow: vicinal lines. red: tramline, open in 1892, at its longest, before 1922. black: 1960s rearrangements of the trunk lines and marshalling yard. Photos: view of the Braşov tram hotspots, before WW1. 1: Bartolomeu church and railway station. 2: Panoramic view from north with the Customs Gate of Braşov fortified area, before 1892. 3: Panoramic view from north, after the Customs Gate demolition, to make room for traffic, especially the steam tram. 4: north front of the central square, with the turning point of the steam tram. 5: the tram station 'Promenade' opposite the financial palace, the present town hall. 6: Noua suburb, highlighting the tramline. 7: reception building of the tram station in Noua suburb, open in 1907. 8: tram in the village Dârste. 9: aerial view of Dârste village with industries and industrial railway branch highlighted].

Around 1900, in parallel with the development of the main railway network, local railway lines, tramways, were open in the more important Transylvanian towns, in order to connect the centre with the industrialising suburbs and with the rapidly expanding residential areas, often former villages included during the same period within the municipal boundaries of the mother-town. Despite the fact that in some tramline shots the tram and/or the line do not always seem to be the main protagonists, it is the tramline streets, rather than other streets, which tend to be depicted more frequently – these were the town's hotlines just as the tram stops were its hotspots.

In Braşov, a major south-eastern Transylvanian city, the tramline [Map 3, red line on the aerial photo] was open in 1892. At its longest before 1922, it connected the northern suburb, the former village of Bartolomeu with the town's centre and the southern suburb Săcele. Mapping the historic postcard locations on the tramway's route, several focal areas are highlighted. In Bartolomeu, the vicinal railway station (yellow line), also the tramway's starting point, is captured behind the mediaeval church, the actual emblem of the place (1). Views of the Long Street (*Strada Lungă*, 2), connecting the Bartolomeu suburb to Braşov's historic core, display a pericentral streetscape, with fronts of uneven height and façades alternating then fashionable neo-classicist and eclectic façades, with the rural-type houses characteristic of the Transylvanian rural baroque of the seventeenth and eighteenth centuries (far on the right front). The image is typical for the late-nineteenth century growth phase, when the town flourished thanks to industry and trade, the pericentral urban fabric undergoing densification (continuous street fronts and added floors) and 'embellishment' according to the time's taste. A much-photographed spot was the Customs Gate north of the historic core (3-3) where the early nineteenth century neo-classical gate, having replaced the mediaeval one, was demolished at the advent of the tramway in order to prevent it from hindering the traffic flow.



WGS84  
34T  
390053.00 m E  
5055846.00 m N

**BRASOV** (Brasso, Kronstadt).  
Tramway in Strada Lungă (Ulita Lunga, Lange-  
gasse, Hosszu-utca).  
Undated BW postcard, 9,5x14,5 cm.  
BCU Cluj Digital Library. Available online:  
<http://dSPACE.bcucluj.ro/handle/123456789/40448>, 22.10.2017.



**Map 3:** Street Lines: Historic Tramways.

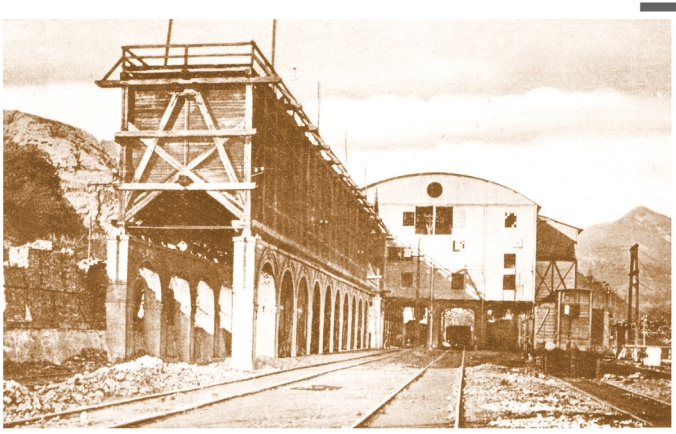
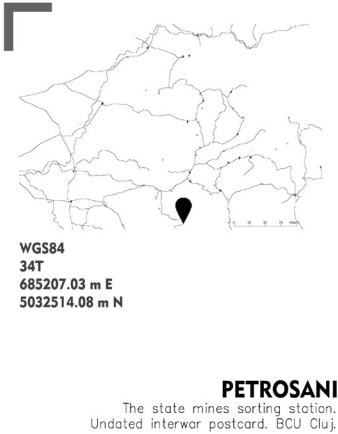
At the very heart of the city views of the tramway's stop in the city-hall square (4) show the loop allowing for the steam locomotive to return. The importance of the tram for the *Belle Époque* city is also denoted by the frequent postcard depictions of the Promenade station with its café terrace aligning with the public garden (5). Tellingly, although the Financial Palace, contemporary with the tramline, always plays an important role in images of this area (5, left) the postcard is not named after it, but rather after the tramline's station. Further southward 'along the line', the rural city outskirts (6, 8) are captured as traversed by the tramline heading to the industrial developments of Dârste (9). Facilitated by the tramline, the improved integration between town and suburbs led to the development of new quarters, such as *Noua* (The New One), with its Secession style tram station (7), frequently illustrated in postcards as a status symbol.

**Map 4:** Cristina Purcar, *Tracks, Mineshafts, Furnaces: Railways in Industrial Sites*. [From left to right: Hunedoara steel work before WWI. Petroșani electric plant and coal sorting station before WWI. Petroșani coal sorting station before the Găvojdia blast furnace, c.1890. Turda cellulose factory before WWI. **P:** Petroșani coal mines sorting station. Interwar postcard. **D:** Petroșani, lower miner-housing colony. Petroșani coal sorting station. Interwar postcards. **T:** Petroșani panoramic view and lower miner colony, interwar postcards. **L:** Hunedoara steel works and castle. **IM:** Petroșani. 6. View of the lower colony from the west. 1. Railway station with reception building seen from south-east. 7. Interwar housing colony, east of the railway line. Maps: *left:* Petroșani, urban growth schemes. *up:* c.1900; *down:* c.2000. *right:* Petroșani urban pattern before WWII (Purcar 2009b)].

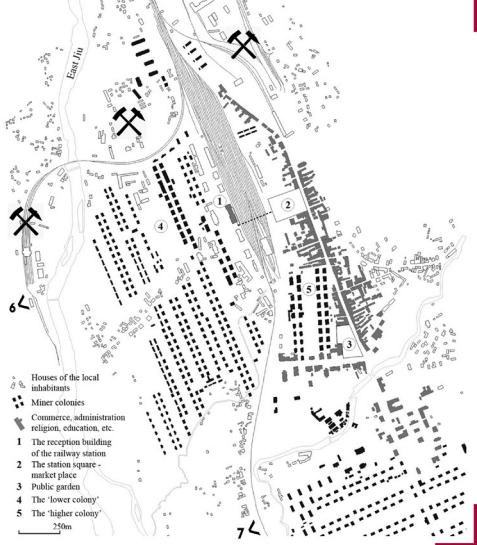
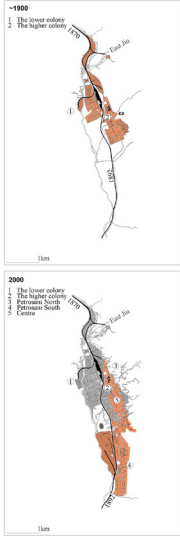
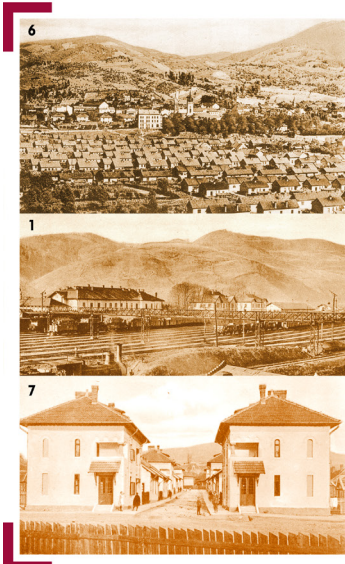
A consistent corpus of late nineteenth-century railway photography consists of views of industrial sites, wherein tracks are always included. These were intended to document the assets of state and private companies as a matter of pride and as a token of the state's or company's modernity and prosperity. Cultivating monumentality and orderliness, the images would also have acted as incentives for shareholders' trust and investment. The powerful, dynamic compositions, foregrounding the neat verticals, horizontals, and diagonals of the industrial buildings and installations are often seconded by the softly blurred, undulating lines of the natural surroundings.

'Appeared as out of magic', as the famous French geographer Élisée Reclus noted after his visit in 1873 (Reclus 1876: 368), Petroșani developed rapidly from a hitherto remote and unknown archaic region of south-west Transylvania into a vivid industrial town, due the advent of railways and the coal-mining boom. From a hamlet of isolated shepherd households scattered on the hills, the mining town formed itself along the Jiu Valley, on both sides of the railway line and station. The latter was not only the catalyst of that urbanisation process, but also, literally, the centre of the emerging urban fabric, its structuring north-south spine. [Map4, IM] In Petroșani, the main coal mining society and worker-housing landlord was also a major shareholder in the society which concessioned the construction of the First Transylvanian Railway Simeria-Petroșani branch.





**PETROSANI**  
The state mines sorting station.  
Undated interwar postcard. BCU Cluj.



**Map 4:** Tracks, Mineshafts, Furnaces: Railways in Industrial Sites.



This led to the particular situation that the more representative part of the town developed east of the railway station, where land was available for smaller public and private investment, since the west side was already occupied by the first miner colony and station buildings. Atypically thus, the station's reception building is segregated from what became the town centre by the wide railway trench of the station, the only link being a footbridge (1). While the diachronic place survey (IM) shows the development of this peculiar urban structure cartographically, historic photography captures its landscape through three characteristic types of images: industries, always integrating the railway lines (P); the colonies with their uniform grid patterns (6 – foreground: nineteenth-century miner colony, 7 – Interwar clerk colony); public spaces and representative buildings such as churches, schools, and hospitals (6 – background). As in the previous case studies, landscape construction via photography proves a highly selective operation: while the railway is only present in views of industrial premises and of the station itself, to make the colonies appear more friendly as domestic places, the railway is usually omitted from the image frame, even if, in order to capture the view, the photographer needs to stand among the tracks (7 – the wooden fence delineates the railway plot).

**Map 5:** Cristina Purcar, *"The Machine in the Garden": Railways in the Countryside*. [From left to right: Stana, Oradea-Cluj railway line, earthworks. Photo by Ferenc Veress, c.1870s (Köpeczi 2001). Brănișca railway bridge near Deva, undated postcard before WWI. Oravița railway viaduct. Interwar postcard. Tunnel on the Oravița-Anina railway line. Interwar postcard. **P:** Railway bridge over the river Mureș on the First Transylvanian Railway (FTR) trunk line, opened in 1868. South view. Undated postcard, before WWI. **D:** Bridge over river Mureș on the FTR (Köpeczi 2001). **T:** Unidentified place. Arad. Bridge over river Mureș. Undated postcard, 1970s. **L:** Lipova. Panoramic view of the FTR along river Mureș. Undated photo. **IM:** photos, up to down: Petroșani, locomotive shed at the northern end of the town. Interwar card. Cetatea Bolii, on the FTR branch line, Simeria-Petroșani. Hand-coloured postcard, before WWI. Centre and below right: front-page and images from French geographer Élisée Reclus' *Récit de voyage to Transylvania's mining regions* (Reclus 1874); all drawings illustrating Reclus' text were made after the original photos of Ferenc Veress].

In *The Machine in the Garden* (...), noticing the long-lasting vitality of the pastoral myth in the American culture, in spite of, or perhaps just because of the force of industrialisation, Leo Marx explains this by the fact that 'the pastoral ideal has been incorporated in a powerful metaphor of contradiction' through its encounter with the 'counterforce' represented by industrialisation (Marx 1979; Purcar 2009a). A large family of railway photography, consisting of track (and train) views within a natural or agricultural context — more often than not focusing on engineering art works such as trenches, tunnels, bridges, viaducts — can be read as illustrations of Marx's 'metaphor of contradiction'. Railway construction images, but also monuments or other remarkable sites viewed from the train were created, published, and collected as symbols of progress and of civilisation's taming of nature.

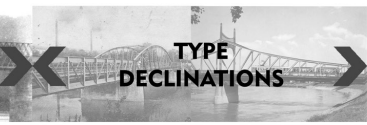
◀ "THE MACHINE IN THE GARDEN": RAILWAYS IN THE COUNTRYSIDE ▶



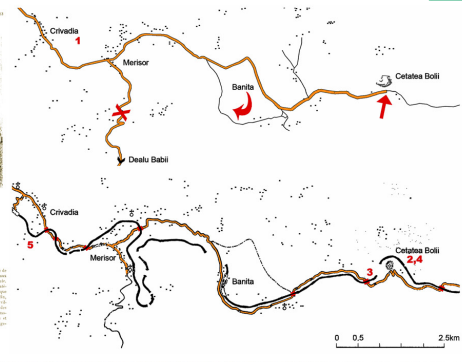
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**BRANISCA**

Railway bridge over the river Mures on the First Transylvanian Railway trunk line Arad – Alba Iulia (1868). South view. Undated postcard, before WWI.



LE TRUC DE TRINQUE  
VOYAGE  
AUX SEIGNS NORDS DE LA TRANSYLVANIE HOHENSTELLE.  
PAR M. RICHIEZ SEIGNEUR.  
1868



Map 5: "The Machine in the Garden": Railways in the Countryside.

Through the countryside, the most remarkable views perceived by travellers along the railway route almost always include powerful images of the railway itself as well. The railway itinerary establishes new spatial relationships with and between the pre-existing 'visual events' of the route, offering new vantage points and introducing new boundaries within the natural terrain. At the same time, the geomorphology of the traversed places together with the track route configuration (determined by the railway design rationale, based on efficiency and economy), combine to create a series of different landscape character sequences, an unintentional landscape design project. As self-coherent territorial-scale architecture, the railway project engendered simultaneously, albeit not purposefully, a coherent *mise-en-scène* of the traversed places, relating similarly to places of similar landscape character: speeding up along strait-cut stretches as a *largo* appeared; slowing down along sinuous sections as the river valley narrowed and the terrain became steeper; emphasising exceptional natural spots by exceptional railway landmarks such as cuttings, tunnels, viaducts, or bridges. Along the First Transylvanian Railway (FTR) trunk and branch lines [Map 5], several such examples of remarkable landscape-generating encounters between railway features and the traversed places can be highlighted: the spectacular tunnel and trench at the Cetatea Bolii cliff near the homonymous picturesque cave (IM, left column, middle and below); the Strei church, one of the oldest stone churches in Transylvania, that became a landmark of the railway journey along the FTR branch line because, unlike the country road, the railway passed very close to it (IM, upper row); the shifting of the main road to Petroșani in favour of a route doubling the railway and the spectacular sinuosity of the route between Crivadia and Cetatea Bolii (IM, maps) described by French geographer Élisée Reclus in his travel account (IM, center) as 'an alpine railroad with numerous and magnificent works of art' [*un chemin de fer alpin, aux nombreux et magnifiques travaux d'art*] whereby a new landscape appears at each following curve' [*à chacune des courbes qui se succèdent se présente un paysage nouveau*] (Reclus 1874).