

- Data to the History of the Transylvanian Woodworking  
Our article may be found on pages 8–21.
- Date despre istoria prelucrării lemnului din Transilvania  
Articolul nostru se poate citi în paginile 8–21.
- Adatok az erdélyi fiamgmunkálás történetéhez  
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## SZABÓ Bálint

### Historic Timber Structures. Report of the Organizing Committee

**Abstract:** The Transylvanian Historic Building Conservationists' Society organized, between 16-18 October, 2008, in Cluj-Napoca, the 12<sup>th</sup> edition of the International Conference on Historic Structures, having the topic *Historic Timber Structures*. The three-day symposium opened with a series of lectures and debates on the given topics. The second day, a workshop was scheduled in Bistrița, on the topic the vulnerability of timber structures, respectively the recent case of the fire that affected the Lutheran Church in Bistrița. The third day of the symposium included field trips to several churches in Sălaj County.

**Keywords:** historic buildings, historic structure, timber structure, structural surveys, roofs structure, load-bearing structure, case studies, conference.

### Structuri istorice din lemn. Raportul Comitetului Organizatoric

**Rezumat:** Asociația Restauratorilor de Monumente Istorice din Transilvania a organizat în perioada 16-18 octombrie 2008, la Cluj-Napoca, cea de-a 12-a ediție a Seriei Simpozioanelor Internaționale de Structuri portante istorice pe tema *Structuri istorice din lemn*. Programat pe durata a trei zile, simpozionul a debutat în prima zi cu prelegeri și dezbateri pe tematica dată. Ziua a doua s-a desfășurat la Bistrița, unde în cadrul unui workshop s-a pus în discuție vulnerabilitatea structurilor din lemn, respectiv cazul recent al incendiului care a afectat Biserica Evanghelică din Bistrița, iar cea de-a treia zi a simpozionului a cuprins vizite de studiu la biserici din județul Sălaj.

**Cuvinte cheie:** monumente istorice, structură istorică, structură din lemn, expertizare structurală, șarpantă, structuri portante, studii de caz, conferință.

### Történeti faszervezetek. A Szervezőbizottság beszámolója

**Kivonat:** Az Erdélyi Műemlék-restaurátorok Egyesülete 2008. október 16–18. között rendezte meg Kolozsváron a Történeti tartószerkezetek nemzetközi konferenciasorozat 12. ülészakát, *Történeti faszervezetek* tematikával. A háromnaposra tervezett konferencia első napja előadásokkal indult, illetve a téma megvitatásával folytatódott. A második nap Besztercén zajlott, ahol műhely keretében a faszervezetek sérülékenysége, illetve a besztercei evangélikus templomban 2008-ban pusztító tűzvész esete volt a megbeszélések témája, végül, a konferencia harmadik napján tanulmányi látogatások következtek Szilágy megyei templomokban.

**Kulcsszavak:** műemlékek, történeti szerkezet, faszervezet, szerkezeti felmérés, fedélszerkezet, tartószerkezet, esettanulmány, konferencia.



Illustration: Specialists in the Lutheran Church from Bistrița  
Ilustrație: Specialiști în Biserica Evanghelică din Bistrița  
Illusztráció: Szakemberek a besztercei evangélikus templomban



## MIHÁLY Ferenc

### Adatok as erdélyi famegmunkálás történetéhez



Illusztráció: Magyarcsügés. Vízmeghajtású keretes fűrész  
Illustration: Ciugheșul Maghiar. Water-driven frame saw

*Kivonat:* A fából épített történeti szerkezetek és műalkotások kutatásának, megismerésének és helyreállításának alapfeltétele a készítéstechnika ismerete. Hiteles kormeghatározáshoz, a károsodási mérték józan megítéléséhez, illetve esetenként a hiteles kiegészítések készítéséhez nélkülözhetetlen a tárgy anyagának és készítéstechnikájának ismerete. A témakör kutatásához több irányból közelíthetünk. A vezérfonalat az írott és képi források számbavétele jelenti, de a tárgy alapos vizsgálata során is olyan nyomok bukkannak elő, amelyek sok mindent elárulnak a fa megmunkálásáról.

*Kulcsszavak:* építési technikák, faépítészet, faszerkezetes építészet, famegmunkálás, ácsmesterség, ácsok, Románia.

### A Study of the History of Transylvanian Woodworking. About Carpentry

*Abstract:* The prerequisite of the research, study and restoration of historic timber structures and works of art is to have understanding of their construction technology. In order for us to authentically determine their age, to correctly judge their degree of decay, as well as to carry out complete studies, we need to know the material and construction technology of our objects. We can approach this subject from different angles. The guiding principle is to identify the written sources, but the detailed examination of the object can reveal information on the woodworking processes as well.

*Keywords:* building techniques, wooden architecture, timber-framed architecture, woodworks, carpentry, carpenters, Romania.



## SZABÓ Bálint

### Mecanica șarpantelor istorice

*Rezumat:* De peste două milenii, șarpantele istorice – de tipuri diferite, în exploatare și astăzi – asigură protecția clădirilor istorice contra intemperiilor. Realizate în mare varietate, șarpantele istorice sunt valori deosebite de patrimoniu, fiind tratate cu un interes din ce în ce mai mare. Intervențiile necesare asigurării exigențelor de performanțe în exploatarea șarpantelor istorice pretind cunoștințe teoretice și practice evolute, modul mecanic de lucru fiind unul dintre subiectele majore care trebuie stăpânite. În lucrare este prezentată o sinteză a comportării mecanice a șarpantelor istorice continentale, scindabile în sisteme planare având caracter romanic, gotic, baroc și eclectic, punând accent inclusiv pe evaluarea valorilor proprii și purtate de patrimoniu.

*Cuvinte cheie:* monumente istorice, șarpante, structuri portante, proprietăți mecanice, studiu istoric, arhitectură romanică, arhitectură gotică, arhitectură barocă, expertizare structurală.

### The Mechanics of Historic Roof Structures

*Abstract:* For over two millennia, historic roof structures – of many different types and still in use today – have been protecting historic buildings against bad weather. Built in a great variety of shapes, historic roof structures have a significant heritage value and are now treated with more and more interest. Interventions necessary in order to meet the excellence requirements for historic roof structures exploitation demand a complex theoretical and practical knowledge, since the manner in which the mechanical work is carried out is one of the main fields that need to be mastered. The paper presents a synthesis related to the mechanics of historic roof structures, divided into frames having a Romanesque, Gothic, Baroque and Eclectic character, also focusing on the evaluation of their heritage value.

*Keywords:* historic monuments; roofs structure; load-bearing structure, mechanical properties; historical surveys, Romanesque architecture, Gothic architecture, baroque architecture, structural surveys.



Ilustrație: Continental Romanesque roof structure (Crasna-Sălaj)  
Illustration: Șarpantă istorică pe traverse având caracter romanic (Crasna-Sălaj)



## Történeti tetőszerkezetek diagnosztikája

*Kivonat:* Épület-fenntartási tervezőrendszerek működtetése épületdiagnosztikai adat- és állapotfelvevési szakértői munkamódszer, algoritmus, épületdiagnosztikai kézikönyvek, szerkezetkatalógusok kialakítását, fejlesztését igényli. Az épület-fenntartási tervezőrendszerek a számviteli szempontú ingatlan- és épületállomány-nyilvántartással szemben a fenntartás és felújítás műszakilag megalapozott tervezésére alkalmas adatbázisok megteremtését, folyamatos karbantartását kívánják meg, ami egyre szűkebb térstruktúrákra vonatkozó, műszaki tartalmában növekvő információhalmazok időben is tagolt felvételét és rögzítését igényli. Az épületdiagnosztikai szakértői rendszerek épületszintű, átfogó; „főszervezetekre” vonatkozó-, továbbá szerkezet- és helyiségszintű, részletes konstrukciós-, mennyiségi- és állapotjellemező információk felvételének, megállapításának, rögzítésének és elemzésének, értékelésének módszereivel foglalkoznak. A vázolt struktúra vezet sokoldalúan használható mérnöki szakmai adatbázisok kialakításához.

*Kulcsszavak:* műemlékek, építészet, fedélszerkezet, épületszerkezet, diagnózis, Románia.



## Diagnostics of Historic Roof Structures

*Abstract:* The operation of the building maintenance planning systems requires the development of a professional work method regarding building diagnostic data collection, the development of an algorithm, of building diagnostic manuals and of structural catalogues. As opposed to the accountancy-oriented real estate and building stock inventory, the building maintenance planning systems require the creation and constant monitoring of databases that are suitable for the technically founded planning of maintenance and retrofitting, which in their turn require the chronological collection and registration of the growing pile of technical information concerning the more and more limited spatial structures. The building diagnostic systems include the collection, determination, registration, analysis and evaluation of all the complex information related to “main structures” on the level of buildings, as well as those on the level of structures and rooms, which are detailed pieces of information characterizing the structures, quantities and states. The outlined structure leads to the development of multilaterally usable professional engineering databases.

*Keywords:* historic buildings, architecture, roof structures, building structure, diagnosis, Romania.

*Illusztráció:* Korhadt, tönkrement alsó fakapcsolat (kötőgerenda, ferde dúc, szarufa)

*Illustration:* Rotten, degraded lower joint (tie-beam, compound rafter, common rafter)



## Ana BÂRCĂ

### Biserica de lemn – între arhitectură și pictură. Ce alegem?

*Rezumat:* Biserica de lemn este un rapel al spațiului construit, un element care nu poate fi ignorat sau subapreciat în habitatul rural. În plus, biserica se înscrie perfect în ansamblul expresiilor formale și simbolice, ea marchează într-un fel specific peisajul, prin prezența sa fizică și prin semnificație. Întâlnită pe întreg teritoriul României, inclusiv în zonele de câmpie, având în vedere dominația materialului lemnos și experiența meșteșugului prelucrării lemnului, construcția bisericii exprimă clar și la superlativ aplicarea tehnicilor și chiar a proporțiilor folosite și la arhitectura locuinței.

*Cuvinte cheie:* monumente istorice, biserici, arhitectură în lemn, arhitectură pe structură de lemn, picturi murale, degradări, conservare, România

### Timber Churches – Architecture versus Painting. What Do We Chose?

*Abstract:* The timber church has a prominent place in the built environment, an element of the rural habitat that cannot be ignored or underestimated. Moreover, the church fits perfectly into the formal and symbolical expressions' ensemble, functioning as a landmark of the environment in which it is placed, thanks to its physical presence and the meaning it carries. Encountered all over Romania's territory, including in the country's plain areas, due to the predominance of timber and to the locals' mastership in wood processing, the erection of the timber church mirrors clearly and brilliantly the implementation of the techniques and even proportions used in the architecture of private dwellings.

*Keywords:* historic buildings, churches, wooden architecture, timber-framed architecture, wall paintings, deterioration, conservation, Romania.



Ilustrație: Ieud Deal, biserică cu hramul „Nașterea Maicii Domnului”, pictura din 1762, zugrav Alexandru PONEHALSKI. Pronaos, ansamblu interior  
Illustration: Ieud Deal, Church of “The Birth of the Holy Virgin”, painting from 1762, the work of Alexandru PONEHALSKI. Narthex interior ensemble.