

NTK

50°6'14.083"N, 14°23'26.365"E

Národní technická knihovna
National Technical Library

210 mm

National Technical Library – Library of Technical Universities

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Synopsis

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- History, the “before”
- Project
 - Vision
 - Goals
 - Dates
 - Facts & Figures
 - Lessons learned
 - Pictures
- Conclusion

History

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- **1718** – Former military engineer **Willenberg** gets Imperial accreditation to teach „Ingenieurkunst“ and gets **300 florins** to buy books, models and instruments
- **1831** – The founder of Royal Czech Estates School F. J. Gerstner charges later professor of fermentation chemistry and rector of the Polytechnic **K. J. N. Balling** with the concentration of books to an indexed, subject arranged collection – advent of the library
- **1869** – after the split of the school to the Czech and German ones, the Library remains a common one, financed from the Country budget
- **1935** – an up-to-date library is built for the Library of Technical Universities (Czech and German) in the eastern wing of Clementinum
- **1960** – Library separated from Technical Universities
- **1991** – back under aegis of Ministry of Education
- **2009** – back to Technical Universities to the Dejvice campus

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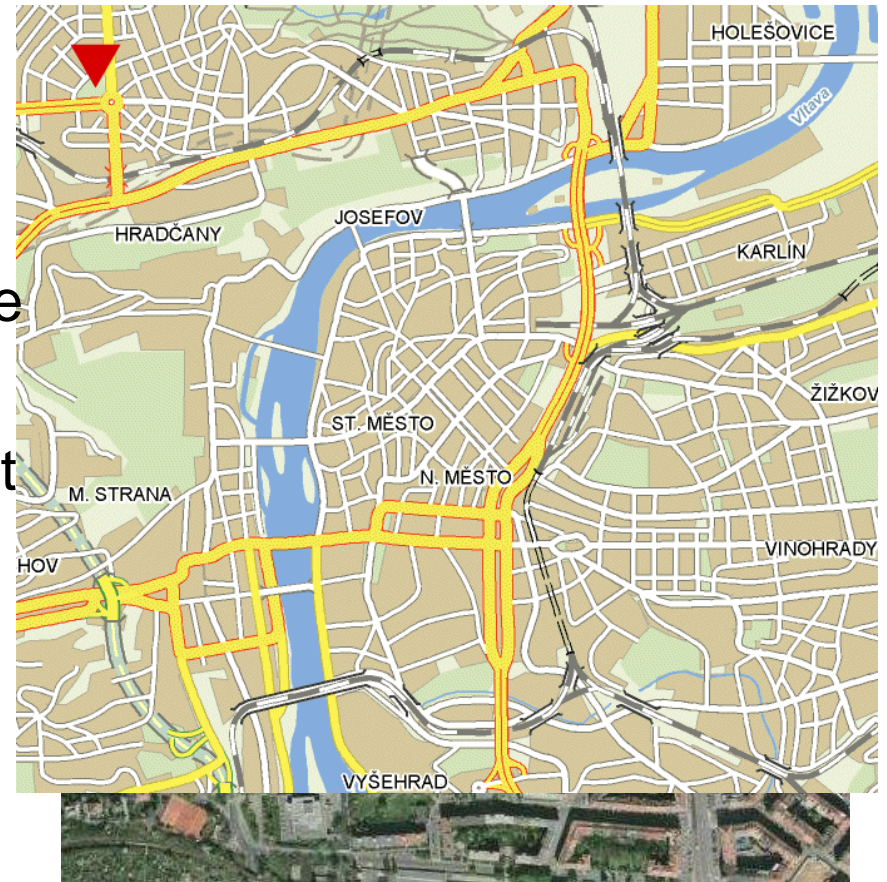


History of the project

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- 1963 **Maniny**
- 1974 head of Nusle bridge
- 1992 **Rohanský isle**
- 1995 Dejvice – Vítězné square
- 1999 heart of the Dejvice
campus – Technická street

■ campus
■ library



Vision of the new library

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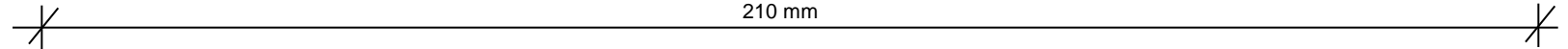
- transparent, permeable, understandable, flexible
- open, friendly, affable, inviting
- low energy and low operating costs house
- moderate use of hi-tech
- interior design – part of the overall building design
- materialised textbook of contemporary architecture, civil engineering and technology

Project goals

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- Modern central common library serving universities, R&D and public in the technology and applied science area
 - national information infrastructure node for technology and related disciplines (e-resources licensing, national repository of grey literature, digitisation, EDD, ISSN centre, ...)
 - R&D laboratory of network technologies for library and information services
 - transform the library back to universities
 - release space in Clementinum for the National Library

Project dates



- 2000/07 – Gov't Resolution - Project NTL approved
- 2001/01 – Architectural contest - Projektil 
- 2001/07 – Memorandum of Agreement ČVUT-STK-VŠCHT
- 2004/02 – Gov't Resolution - budget 
- 2004/10 – project design started
- 2006/06 – permits acquired, supplier tender
- 2006/10 – the first dig 
- 2008/12 – take-over
- 09/09/09 – opening of NTK to public

Costs

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Overall project cost	76.17 mio £
<i>out of it</i>	
building – carcass	38.75 mio £
technologies except IT	17.73 mio £
IT	4.20 mio £
interior – mobiliary	4.16 mio £
project management	2.37 mio £
project documentation	2.50 mio £
engineering supervision	3.87 mio £
financial services	5.98 mio £

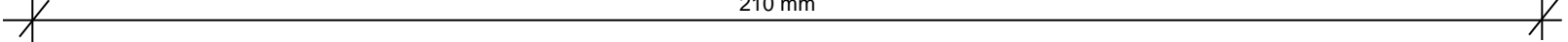
exchange rate as of 6 Sept 2009

Library spaces, volumes

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- 1 322 study seats, mostly w/ network access + WiFi ubiquitous
- 562 relaxation seats
 - 29 individual study rooms (of it 2 for physically disabled and 2 multimedia study rooms suitable for visually impaired)
 - 18 group study rooms for 8-10 people
 - 4 computer study rooms (1*30, 3*50 seats)
 - 1 night / complementary reading room
 - 1 journals reading room, >2000 journals + 15000 e-journals
- 34 OPAC terminals + user PCs throughout the building
- >350 000 volumes in open stacks arranged by LCC
 - + ~ 150 e-textbooks
 - + 1.2 million volumes capacity in closed stacks underground

Other functions

- 
- social functions for the campus in the ground-floor:
 - conference hall 230 seats
 - exhibition hall 370+410 m² (90+50 seats)
 - café/restaurant 150 seats
 - municipal library branch Praha 6 (32 seats, 25 000 vol's)
 - university bookstore; IT store & accessories
 - training centre @ 30 seats in variable setup
 - drink and snack machines on each storey
 - baby changing boards
 - + first-aid room in the basement
 - 300 parking places, 200 bike stands
 - 900 000 clients/year

Building

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53 820 sq ft **building plot area**, of it

44 280 sq ft built-up area

6 083 234 cu ft **total building volume**, of it

4 055 501 cu ft above ground

2 027 733 cu ft under ground

416 143 sq ft **useful area** of all storeys

9 storeys, of it 6 above ground, 3 under ground

6 elevators and 5 staircases throughout the whole building

8,025.36 Mbtu expected **annual energy consumption**, of it

4,292.47 Mbtu heating

3,732.88 Mbtu cooling

Construction

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1 743 838 cu ft	of earth excavated
55 711 t	weight of load-bearing structure, of it
102 t	steel structures
38 t	steel roof of the atrium
51 628 t	concrete without armature
400 t	tendons
25 mi	pre-stressing channels
600 t	pre-fabricated stair wings
5 399 sq ft	outer shell – glass form-pieces
6 320 sq ft	outer shell – sheet glass

„Guinness book“ figures

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118 mi	light-current cabling
1,100,000	cable clips
1346	automated combustion gas detectors
256	acoustic motion detectors
117	cameras
28.6 mi	heating/cooling piping in floor slabs
38 750 sq ft	floor heating in ground floor
233 254 sq ft	rubber flooring
44 401 sq ft	bituterazzo in the ground floor
27 986 sq ft	sound absorbing lining
12.43 mi	pipes of high pressure extinguishing system
4 110	nozzles of high pressure extinguishing system
1 345 ft	automatic smoke & heat screens

Lessons learned

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- **P**lot – fundamental, otherwise risky business
- **P**ecunia – not just the volume, the certainty is what counts
- **P**artnership – in-house, governing body, architects, designers, contractor, ...
- **P**erspective – design for the [unknown] future
- **P**hlexibility – both in project and in decisions

People

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Everything described above, that is the idea, the design and a construction of the new building, in parallel with the working “old library” shaping up for the reincarnation in the new environment; this all starting with authors of the initial idea, through archeologists, architects, artists, assemblymen, building team, businessmen, designers, developers, draughtsman, economists, gate-keepers, IT people, lawyers, librarians, managers, organisers, suppliers, quantity & quality surveyors, trustees, etc. is a result of a collaboration of tens and tens of people.

I would like to thank all who endeavoured to accomplish this Gesamtkunstwerk.

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Some pictures

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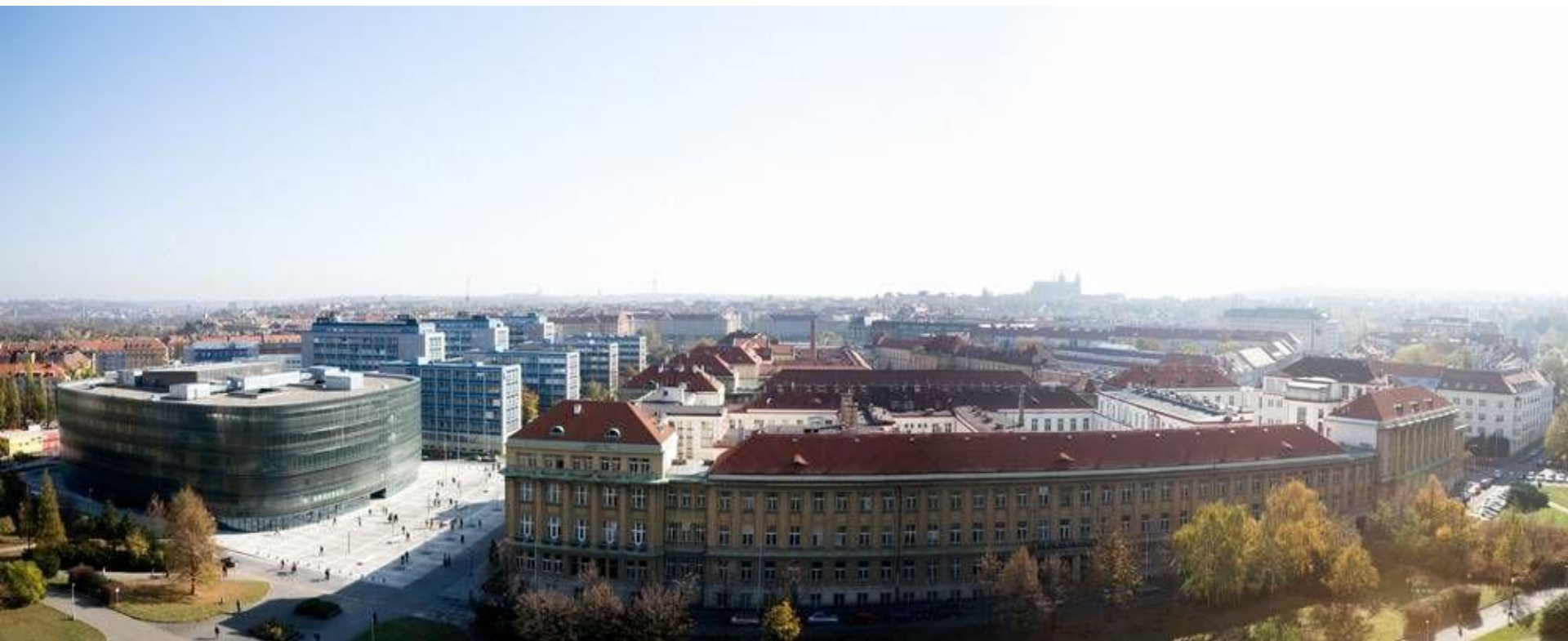




Jan 2007

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PAMĚTNÍ LISTINA

PŘI PŘÍLEŽITOSTI SLAVENOSTNÍHO
POKLEPU NA STAFBU
NÁRODNÍ TECHNICKÉ KNIHOVNY
V PRAZE A DEJVICÍCH

V tomto okamžiku, kdy se odehrává tak důležitá událost, bychom chtěli připomenout, že tato kniha je nejen památkou, ale také nástrojem pro budoucnost. Je to nástroj, který nám umožňuje sledovat a analyzovat vývoj společnosti a její vliv na životní prostředí. Tato kniha je tedy nejen památkou, ale také nástrojem pro budoucnost. Je to nástroj, který nám umožňuje sledovat a analyzovat vývoj společnosti a její vliv na životní prostředí.

SLUŽBY
STÁTNÍ
TECHNICKÉ
KNIHOVNY
REFERENČNÍ
STŘEDISKO

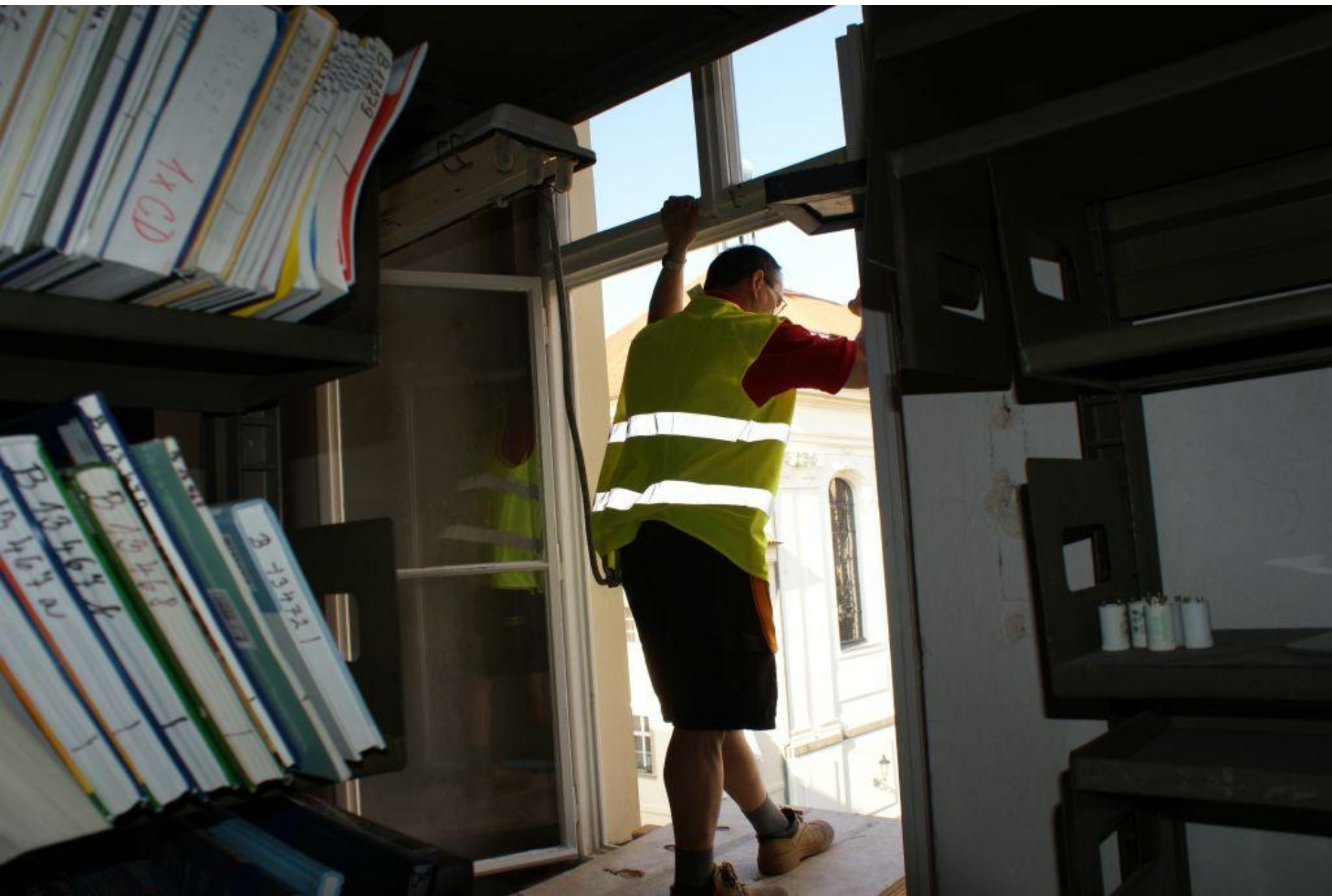
- konzultační služby
- řešení služby
- přístup k elektronickým zdrojům
- předání studijních materiálů, zákony

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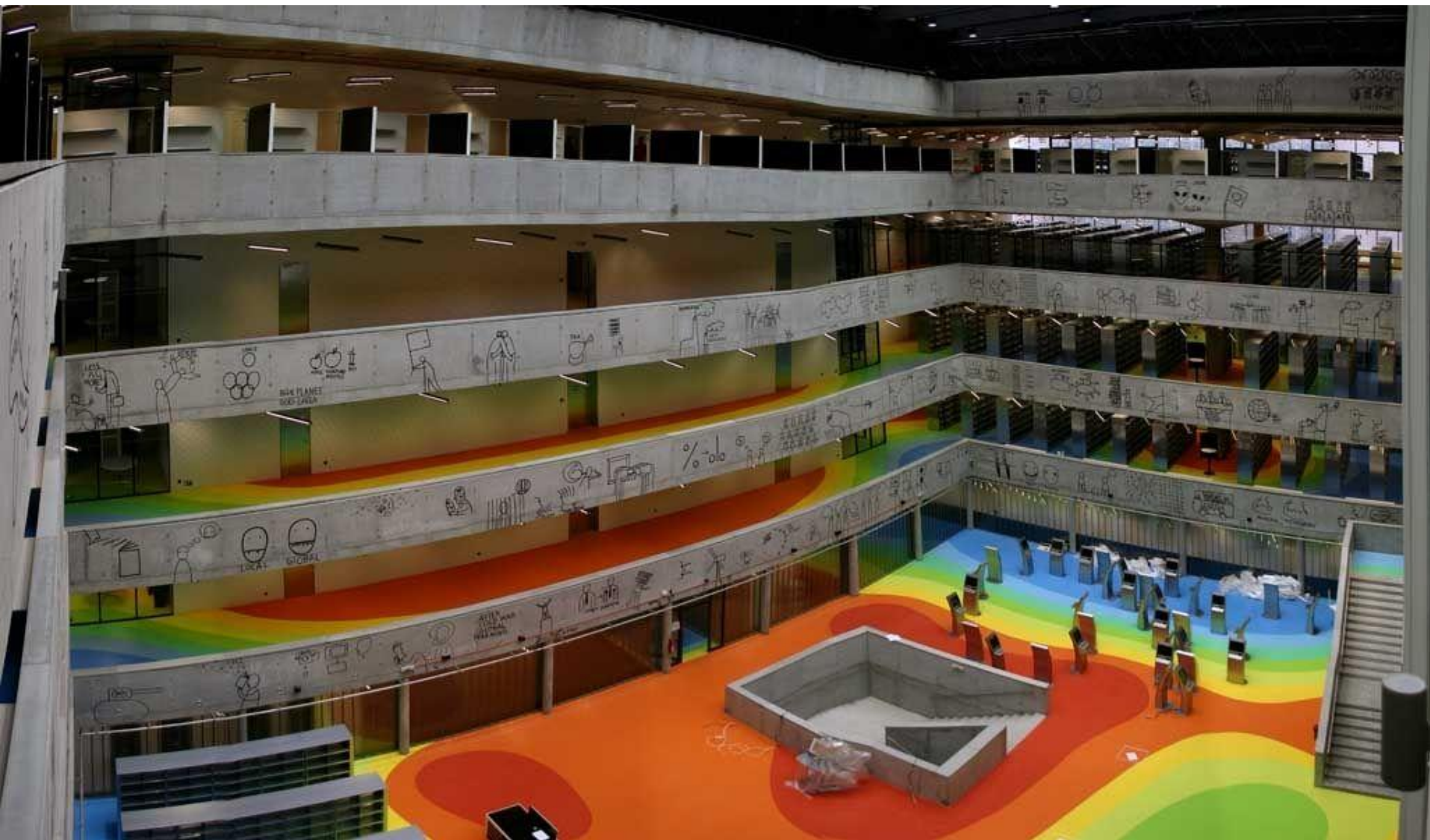
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Thank you for your attention
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Sir Tim Berners-Lee

for Nobel prize !