

National Library of Greece the Past Meets the Future A systemic approach

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Εθνική Βιβλιοθήκη  της Ελλάδος
National  Library of Greece

Color and fonts convention

Words in		are
blue	=	of Greek origin
<i>bold and italics</i>	=	<i>system thinking</i> concepts
<i>Blue, bold and italics</i>	=	Greek origin and <i>systems</i> concepts

A streetcar named ... the Future

(Λεωφορείον το μέλλον)

For some people (of the past), the "future" is simple:

- it looks like a streetcar/bus that they are waiting at the bus stop to take them ... somewhere

A streetcar named the future

(Λεωφορείον το μέλλον)

For other people and organisations,
(belonging to the future),

the “future” is

- more complex
- more demanding
- in terms of thinking
- In terms of actions

A streetcar named the future (Λεωφορείον το μέλλον)

They have:

- To identify needs and recognize challenges
- to design “buses”, and build “streetcars”
- "avenues" to open up
- "stations" to erect and "stops" to place
- to train “drivers”, “engineers” and “passengers”
- to organise “routes”
- to transport to the future those waiting at the “bus stop named ... the future”

The object of libraries

- For some people and **organisations** (of the past), the object of libraries **was, is and will be books**,
 - (as we know them for longer than the last five centuries 1455 - 2022= 567)
- For other people and **organisations** (belonging to the future) the object of libraries has been, is, and is likely to continue to be **the dissemination of human thought**, in the form of
 - **organizing the contained information**
 - engaging in the process of **discovery, learning** and ever new **knowledge**

Libraries are **historicity** compatible

By their nature, libraries of the 21st century, as in all **periods** and **epochs**, have **memory**

A brief retrospective helps us

- to remember that people and **organisations** «of the future» existed in the **Past** and
- to draw conclusions about our own **Present** and our own **Future**.

New **technologies** of the past

1890s-1940s

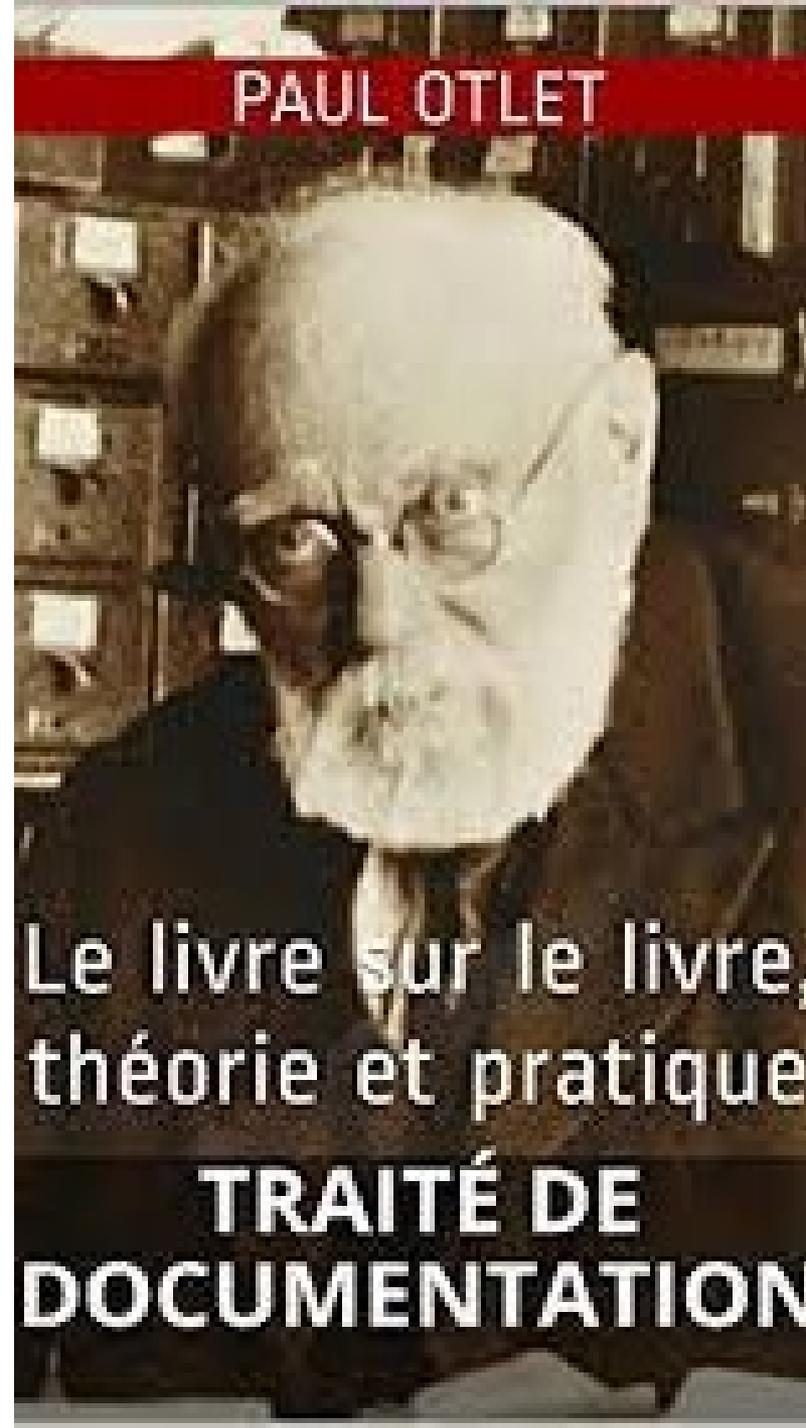
the promising “new **technologies**”

- of **microphotography**,
- radio and
- the newly emerging **television**.

In 1934, Paul Otlet in “Treatise on Documentation. The book on books. **Theory and practice**”

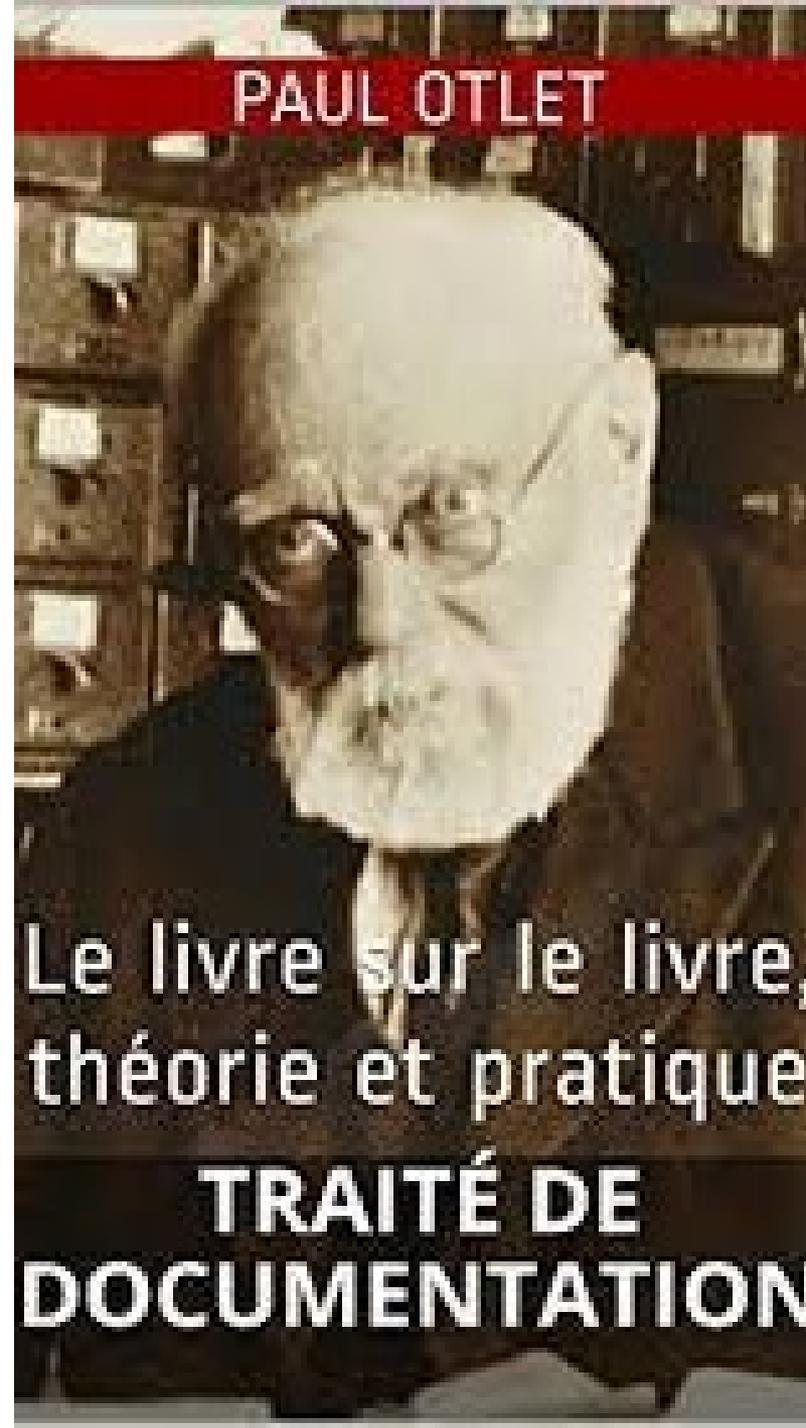
Combines elements that with today's **technology** we would compare to

- virtual reality
- interactive TV
- remote access
- **hypertext** and **hyperlinks**
- information retrieval **techniques**
- information **technologies**



In 1934, Paul Otlet in “Treatise on Documentation. The book on books. **Theory and practice**”

- search **strategies**
- interconnected **databases**
- **database** management **systems**
- **scholarly** communication networks
- multimedia
- **tele**conferencing
- and the 'modern concept' of information dissemination:



Paul Otlet in “Treatise on Documentation. The book on books. Theory and practice” 1934

- "Cinema, phonograph, radio, television - these tools that were considered as replacements for the book have in fact become the **new book**, the most powerful medium for the dissemination of human thought.
- With radio not only will anyone be able to listen but also to speak.
- With television not only will anyone be able to see what is happening anywhere, but anyone will be able to see **what they want from their own perspective and interest**.
- From his armchair anyone will be able to listen, watch, **participate**, even cheer, sing in a choir, add his voice of participation ... to those of everyone else."

(Otlet 1934 p.: 431)

Paul Otlet, “Monde, essai d'universalisme” Bruxelles, Mundaneum, 1935

(Paul Otlet “World. Essay on Universality. Knowledge of the world. Feelings of the world. [Organized](#) action and design of the world” 1935)

- “[A] device unaffected by distance, combining radio, X-ray, [cinema](#) and [microphotography](#) at the same time.
- All things in the universe and all human things will be **recorded from a distance as soon as they are created.**
- This is how the moving image of the world is created, its memory, the copy of its truth.”

(Otlet 1935 p.: 390-391)

Paul Otlet, “Monde, essai d'universalisme” Bruxelles, Mundaneum, 1935

- “From a distance anyone will be able to read any passage extended or limited to the subject of his interest, projected on his personal screen”.
- “Thus from his armchair, anyone will be able to study the whole of the creation or particular parts of it.”

(Otlet 1935 p.: 390-391)

In 1935 the German librarian Walter Schürmeyer "narrates the future":

- ““What a revolution **television** could bring to information retrieval and especially to libraries. Perhaps one day we will see our reading rooms deserted and in their place a room without people, where books will be displayed, requested by **telephone**, and read by people in their homes on **television**.”

(Schuermeyer 1936)

- All these in the era of the “**new** technologies of **microfilm**”

Visionaries of the Past and Libraries

- Visionaries were not lacking in almost any **period** of societal and **technological history**,
- What was perhaps lacking were the necessary conditions and especially the appropriate **technologies**
- The **New** ICT - Information Communication Technologies

The Past meets the Future

Living the Present, we create the Future

- Creating the Future with **Systems** thinking/approach
- Why a **methodology**? – Why a **Philosophical** frame?

The Properties of digital information – **philosophical / technical** approach

National Libraries

- Mission: challenges in the digital era - Questions

The case of (the National Library of) Greece

Why *systems* thinking?

Because

during the previous two **decades** the field of libraries

- faces a fluid or **dynamic** situation
- the position of the libraries can be considered
 - as being **problematic** or
 - susceptible to improvements
- the **characteristics** of “solutions” are not known or predetermined

Why *systems* thinking?

Because

- **complexity** of the relations among the factors that create, influence, subject or “possess” the **problem**
- high degree of **uncertainty** due to the transitional **character** of the **technological period** that is covered
- discontinuities

These kind of issues and factors dictate the exploitation of **methodological** tools of **systems** thinking

Systems thinking on Libraries Future

Libraries and their collaborative **schemes** create **hierarchies** considered as **open systems** of **purposeful human actions** that interact with the **sub-systems** of the **environment** in order to achieve their **purpose**

Systems thinking on Libraries Future

Need for reconsidering some **critical** issues

What is the *Purpose* of the ***system*** named Library

- Specify ***emerging*** functions in order the mission to be fulfilled

Extending the ***boundaries*** of the ***system*** Library

- Where are the boundaries in **hybrid** Libraries or Libraries without walls?

Environment of the ***system*** Library

- **Emphasis** on the **technological** environment

Recognize ***interconnections***

Identifying ***feedback***

Re-assessing the ***flows***

Systems thinking

Speaker's *Weltanschauung* (= *worldview*)

concerning Libraries evolution in the digital environment

- Libraries are not dealing (only) with books
- Libraries are dealing with **data, information** and **knowledge** about (or derived from)
- books, journals, manuscripts, **autographs, archives, bibliographies**, maps, **periodicals**, newspapers, posters, **databases**, e-journals, e-books, web pages, oral **history** records, **cinema** movies, **music disks, ephemera** etc. etc. etc.

Information is the object/service that libraries are dealing with

Systems thinking

Speaker's *Weltanschauung* (= *worldview*)

concerning Libraries evolution in the digital environment

- The pattern of the «**Library of Alexandria**» (3rd century BC), i.e. **concentration** of all the available written / printed / recorded knowledge in one single place, does not correspond to the reality today
- Mainly because of the
 - **plethora** and the rate of development of new information/knowledge and therefore
 - the **economic** restrictions that these factors

Systems thinking

Speaker's *Weltanschauung* (= *worldview*)

concerning Libraries evolution in the digital environment

Nowadays libraries are moving

from

- Acting isolated with acquisition, **concentration** and **organization** of information material **locally**

to

- **Access** to information sources, globally
- **interconnection** and **integration** of information **systems** and **services**
- through the operation and **synergies** of **collaborative schemas**

Systems thinking

Speaker's *Weltanschauung* (= *worldview*)

concerning Libraries evolution in the digital environment

- The (future) library resembles a component of the **global/planetary mesh (grid)** of information sources
- The evolution of the **Information Technologies** imposes the interdepartmental collaboration and the overstepping of **geographic** and **scientific** borders
- Libraries, acting as functionally “**autonomous**” entities within the Institutions, “cede” voluntarily a part of their “**relative autonomy**” in order to solve problems in a higher **hierarchy of organization**, such as “library networks” - **consortia**, for the more effective fulfilment of their *mission*

Systems thinking

Speaker's *Weltanschauung* (= *worldview*)

concerning Libraries evolution in the digital environment

- Library as a notion can be perceived as an **open system** which is influenced/affected by many **subsystems** of the **environment**
- Library make use of the **technological tools** that are available each **period** (papyri, parchments, **cylinders**, paper, books, typewriters, cards, **microfilms**, computers, networks, internet, **smartphones** etc.)
- Information **Technologies** consist only one **subsystem** out of those that are related with and mainly affect Libraries

Systems thinking

Speaker's *Weltanschauung* (= *worldview*)

concerning Libraries evolution in the digital environment

- During the previous centuries **dramatic** changes took place to domains-*subsystems* of the *environment* of the libraries (**political organization**, society, **economy**, education, civilization, moral and **ethical** values, knowledge and perception of the world etc.)
- Those changes affected the **character** of the Library (e.g. social groups of users, users age, interests)
- But they did not affect the nature and the way of the operation of the **system** Library, **at the degree and extent** that was affected by the diffusion and the introduction of Information **Technologies**

Systems thinking

Speaker's *Weltanschauung* (= *worldview*)

concerning Libraries evolution in the digital environment

Digital Information: the new object that Library is dealing with

If so, we need to explore (some of) the unique distinctive features (properties, **characteristics**)

- of the notion **Information** and
- of the notion **Digital Information**

that **characterize** them as **intangible/immaterial good**, different from other goods, commodities or products

13 Properties of Information (entities) 1/4

1. Communication dependency

- Information needs communication in order to exist, sender, code, [symbols](#), transmission, means, message, receiver

2. “Un-consumability”

- Information is unconsumable, communicating an information entity it remains to owner/producer. Offering an apple, does not.

3. Un-competitiveness

- In [economic](#) terms, as non consumable remain repeatedly available after being given

4. Multi-usability

- many users can obtain and make use of the same information entity. The usage by one user does not deprive the ability to be used by other or the same user repeatedly

13 Properties of Information (entities) 2/4

5. Personalization

- different kind of uses of the same information entity by the same or different users, even in cases of **massive** transmission

6. Multi-faceted entities

- a single information entity can be perceived with many “views”, many approaches and uses, values, multi valued (because of 5)

7. Multi-usefulness

- a single information entity covers more than one information need (because of 5 and 6)

13 Properties of Information (entities) 3/4

8. Spillovers

- wide range of impact or implementation even different from the creator's intentions, (because of 5, 6 and 7)

9. Uniqueness

- a unique information entity cannot be fully replaced or substituted by another. Apples, transport vehicles can be replaced, but information concerning the **dose** of a certain **pharmaceutical** cannot

10. Emergency

- the conceptual connection and combination/**synthesis** of more information entities may result to more information entities, not simply to an information stock or their “conceptual sum”, but to brand new information entities

13 Properties of Information (entities) 4/4

11. Reproduction cost

- The reproduction (reconstruction) of information entities is of low marginal cost no scarcity of resources

12. Value added susceptibility

- The representation of the information entities are open/scalable to value added e.g. by changing the original appearance, re-arranging content, re-sorting, changing format, resizing the fonts etc.

13. Non-linearity of production and linearity of reproduction

- Cumulative property does not apply on information production. Employing 4 **Physicists** may not result the relativity **theory** in 1/4 of the time that took Einstein. On the contrary, four printers can reduce the time needed for reproducing a document in 1/4.



Vallianeion Megaron: The **historical** building of the National Library of Greece 1903-

31 Properties of Digital Information (entities) 1/6

14. Synchronous multi-usability

- make use of the same information entity by many users simultaneously

15. Technologically mediated access (vs. unmediated for printed)

- Printed information is **technologically** unmediated
- Mediation needed for the networked digital information includes servers, storage, operating **systems**, network, workstations, searching and formats reading software, screens etc.

16. Need of skills by the user

- **information literacy** is a prerequisite for access and usage of digital information

31 Properties of Digital Information (entities) 2/6

17. Release from spatiotemporal restrictions

- no need for spatial and temporal proximity of user and information, availability from “here and now” to “wherever and whenever”

18. Convergence of means

- Concerning networked digital information, once digitized, different **types** of content and carriers/means (manuscripts, printed texts, books, journal articles, **periodicals**, maps, plans, still and moving images, **photographs**, messages, voice and concert recordings, tv broadcasts, **serials**, movies, **theatrical** plays etc. are all expressed in 0-1 sequences and available from a single device considered by the user as (digital) content (files).

31 Properties of Digital Information (entities) 3/6

19. Continuous vs. interrupted-**periodical** information flow
 - Compare news sites vs. newspapers, e-journals vs. printed issues of **periodicals**, continuous updates, adding new findings are possible every moment
20. Groups of **homogenous** units and finite sets of information entities
 - fixed articles in issues of a journal vs. digital sets created by users according to their needs
21. **Dynamic** form of digital information entities (vs. **static** of printed)
 - A printed book remain unchanged for all its life **cycle**, digital can support changes by the creator or even the users

31 Properties of Digital Information (entities) 4/6

19. Natural proximity vs. distance between metadata and content

- In **organized** printed information entities (library collections) the **catalogue** is a distinct entity not directly connected with the information means-books even in 2-3 meters distance.
- In networked digital information **meta**data can be directly connected even in the other side of the **planet**.

20. Interconnectivity of digital information entities

- permits the evolution of more properties (7 multi-usefulness, 8 spillovers, 10 emergencies, 12 value added).

21. Speed of transmission

- a) time needed for creation of a unit (e.g. to complete a journal issue, property 19)
- b) time needed to be transferred available at users' places.

22. Extent of transmission

- **technically** all places in the **planet**, valid even for locally addressed information

31 Properties of Digital Information (entities) 5/6

26. Direction of moving users-information

- Information is directed to the users' place instead of users going to the library

27. Uniformity vs. personalization of presentation of information

- Uniformity is kept in printed information among all items/copies of printed information, books are the same for all users.
- In digital environment personalization is possible concerning presentation, layout **morphological** changes, selection of entities in different ways for every user

28. Variety and incompatibility of formats

- Due to continuous evolution of Information **Technologies** the mediated information (property15) appears incompatibility issues of previous formats with newer devices, software **programs**.
- Need of short-term and long-term digital curation for the next years or centuries
- A book or a manuscript is readable even after centuries

31 Properties of Digital Information (entities) 6/6

29. Convertibility of formats

- As a result of “convergence of means” (property 18) and despite of the “Variety and incompatibility of formats” (property 28) in **parallel** converting content is possible.
- Examples: image to text (via Optical Character Recognition, OCR) text to speech or text to braille, voice to text (dictate) or music score to sound (**music**) etc.

30. **Empirical character** of information goods

- Assessing the value of information requires the usage and the familiarization of the user with the content.
- Users cannot know in advance if information needs will be eventually covered.
- Correspondingly, the Library have difficulties in assessing the reasonable cost and estimating the value for money by purchasing a book, subscribing to a journal, a **bibliographic database** or (more important) contracting a consortium agreement with a publisher.
- Under uncertainty conditions the decision is **based** on previous experience (quantitative and qualitative data) and intuition.

The mission of National Libraries 1/4

The mission of all National Libraries is to:

- Identify
- gather - **concentrate**
- **organize**
- describe
- safeguard
- preserve and
- disseminate documents / information concerning the country

National Libraries safeguard the past and the present for the future

For this purpose, National Libraries cover three areas:

1. Legal deposit: everything produced/published in the country
2. Everything (?) concerning the country produced /published abroad
3. Selective works of the human civilization achievements
4. Coordinate, promote, advocate, guide the libraries of the country

The mission of National Libraries 2/4

Identify

- Use of internet expands the “pool” of gatherable documents all over the world.
- Increase volume of documents
- Printed and **digital**
- **Internet archiving, web crawling, web harvesting**

Gather - **concentrate**

- The more **analog**-printed documents are identified the more **natural storage and space** is needed.
- All **new library buildings** are larger than the previous ones they replaced
- The more digital documents are identified the more **computer storage and space** is needed.
- As **hybrid** Libraries are not only books, digital documents need their space
- **Technological** dependencies turn National Libraries into huge petabyte owners (or administrators)

The mission of National Libraries 3/4

Organize

- Collections not only in shelves, but also in **repositories**, **databases** or **platforms**, **national digital libraries**
- From isolated library **catalogue** to **collaborative master union catalogue**
- From avoiding repeated tasks and efforts by every single library to every single task to be exploited repeatedly by all libraries within a collaborative scheme

Describe

- and **interconnect** with related works (from AACR2 to **FRBR** and **RDA**)
- From stand alone authority files, just online **static** to as **Linked Open Data**, enriching and exploiting the **semantic web**
- **internet archive**: use AI (Artificial Intelligence) instead of traditional human **methods** and **techniques**
- From each single library alone to all coordinated by the National Library

The mission of National Libraries 4/4

Safeguard

- Not all the conventional-**analog**-paper documents are yet safe and destruction-free (Preservation, Conservation)
- Saving through **coordinated digitization** (repetitive use not repetitive efforts)
- Keeping safe through digitization, but for how long? 8, 12, 20 or 40 years
- Safeguarding also intellectual property rights (copyright) (provisions for leak-proof **practices, mechanisms, techniques**). Publishers as partners not opponents.

Preserve

- Digital curation for long term preservation
- Need of multiple data **centers**
- Need of continuous digital objects file checking
- Continuous updates

The case of the National Library of Greece (NLG) a Report or Action Research

Established in 1832

Collections:

640.000 records in the [catalogue](#) (books, journals, newspapers, maps)

1.500.000 volumes appr.

300.000.000 e-documents accessible and searchable through EDS

100.000 old books 1470-1799, of which

20.000 rare books

5.431 manuscripts (codices), of which 870 digitized

170 [archival](#) units

Personnel:

- 86 permamnent currentmly
- 78 secondments from Education currentmly

Buildings: 4

- 30.000 total square [meters](#) appr.

The case of National Library of Greece (NLG)

Restart with the new building a donation of Stavros Niarchos Foundation (SNF) 2009, operating 2017

- The old building was also a donation of ship owners 1886, operating since 1903

1. New NLG Foundation Act 2017

2. New Organisation and Organisational Chart (to be approved).

- 7 Directions
- 26 Departments
- 390 personnel
- 37 specialties

3. Five-year Development Strategic Plan, 2022-2026

- Three pillars
- Seven actions
- 122 projects

4. Establishing the National Hellenic Libraries Network 2014

5. A lending department within the National Library of Greece

- a model for the public libraries of the country

NLG moral/**ethical** dimensions - implementing principles

- **Open access**
 - Not (only) because of the **journal price crisis** but
 - Mainly, because information entities' **endogenous characteristics**, not consumable
- **Unified information (eco)systems**
 - because content (alone) is not the king (Odlyzko),
 - **Interconnectivity** is, **synthesis** of information entities, creation of new information entities, **new endless knowledge**
- **Personalization fulfillment of individual information needs**
 - because there is not such a thing as “average user”
- **Collaboration**
 - Because of **syncretism** = learning from the others, absorb and turn **empirical** evidences into **theory** and **practice**

NLG Five-year Development Strategic Plan, 2022-2026

Pillar One: Completion of all classic services of a developed National Library with a modern approach

Strengthening and raising the National Library of Greece at levels corresponding to the high rank and estimation that the **Hellenic Civilization has had through the centuries**

- (P1.1) Development of the National Collection, documenting the evolution of the Greek civilization and its **perception** through the ages
- (P1.2) From bookshelves to self-knowledge. Awareness of the collections available in the country
- (P1.3) National Digital Library and National Web [Archive](#)

NLG Five-year Development Strategic Plan, 2022-2026

Pilar Two (P2): Consolidate NLG as the leading library of the country

Strengthening the NLG to raise the **Hellenic Libraries Ecosystem** at levels corresponding to the **modern Hellenic Civilization**

- (P2.1) National **Hellenic** Libraries Network
- (P2.2) NLG as the **Prototype**/model for the libraries

Pilar Three (P3): Establishment of NLG as an unsurpassed center for Greek studies internationally

Strengthening the NLG to emerge as the primary center for supporting the study of Hellenic Civilization internationally.

- (P3.1) NLG and Centers of excellence for Hellenic Studies worldwide

Εθνική Βιβλιοθήκη  της Ελλάδος
National  Library of Greece

Διαχείριση λογαριασμού  ή Εγγραφή ως:

α → Πιστοποιημένος χρήστης

Certified user

β → Απλός χρήστης

Simple user

User authentication system (2017)

Cross check:

1. Tax *System* Number
2. Social Security Number
3. email / mobile *phone*

Αναζήτηση στον κατάλογο

Όλα τα πεδία

Αναζήτηση

Σύνθετη

Καθαρισμός

Κατάλογος EBE / Καθιερωμένοι Όροι EBE

Αναζήτηση:

Σχετικά θέματα σχετικά με την αναζήτησή σας.

Τύπος, Ελληνικός 3.455

Τραγούδια, Ελληνικά 2.304

Ημερολόγια 1.855

Ελλάς Ιστορία Επανάσταση του 1821

Αγγλική γλώσσα Διδακτικά βιβλία

Θεολογία 1.584

1.783

για ξενόγλωσσους 1.686

περισσότερα ...

Περιορισμός αναζήτησης

Φορέας

Εθνική Βιβλιοθήκη της Ελλάδος

633.625

Βιβλιοθήκη

Ερευνητική Βιβλιοθήκη

609.775

Δανειστική Βιβλιοθήκη

38.086

Εμφανίζονται 1 - 20 Αποτελέσματα από 633.625 για την αναζήτηση '', χρόνος αναζήτησης: Ταξινόμηση Ανά σχετικότητα

0,176λ

Electronic Reading Room (e-book lending)

2.500 modern e-books
18 Greek publishers

Licenses funded by SNF and NLG

Free of charge for the readers

Αναζήτηση στο ηλεκτρονικό αναγνωστήριο

Το ράφι μου

Οι όροι χρήσης της υπηρεσίας του Ηλεκτρονικού Αναγνωστηρίου έχουν ανανεωθεί. Για περισσότερες πληροφορίες επισκεφτείτε την ενότητα **Ηλεκτρονικό Αναγνωστήριο**

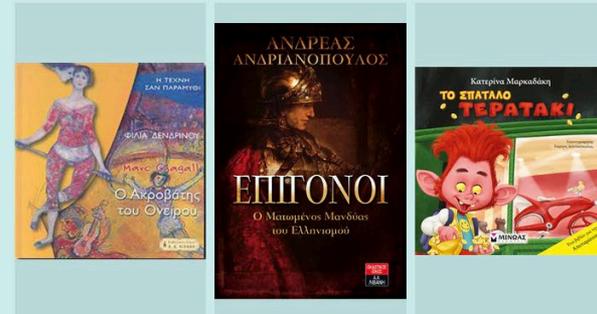
ΤΟ ΗΛΕΚΤΡΟΝΙΚΟ ΑΝΑΓΝΩΣΤΗΡΙΟ	ΟΔΗΓΙΕΣ ΕΓΓΡΑΦΗΣ	ΟΔΗΓΙΕΣ ΧΡΗΣΗΣ	ΣΥΧΝΕΣ ΕΡΩΤΗΣΕΙΣ
ΒΙΒΛΙΑ	ΣΥΓΓΡΑΦΕΙΣ	ΕΚΔΟΤΙΚΟΙ ΟΙΚΟΙ	ΕΠΙΚΟΙΝΩΝΙΑ

Σύνολο βιβλίων:	2329
Κατηγορίες Βιβλίων	
Γενικά Θέματα	
Φιλοσοφία και ψυχολογία	
Θρησκεία	
Ιστορία και γεωγραφία	
Γλώσσα	
Τεχνολογία (εφαρμοσμένες επιστήμες)	
Λογοτεχνία και ρητορική	
Κοινωνικές επιστήμες	
Φυσικές επιστήμες και μαθηματικά	
Τέχνες και διασκέδαση (Καλές και διακοσμητικές τέχνες)	

Ανακαλύψτε Βιβλία



Λογοτεχνία



Παιδικά Εφηβικά

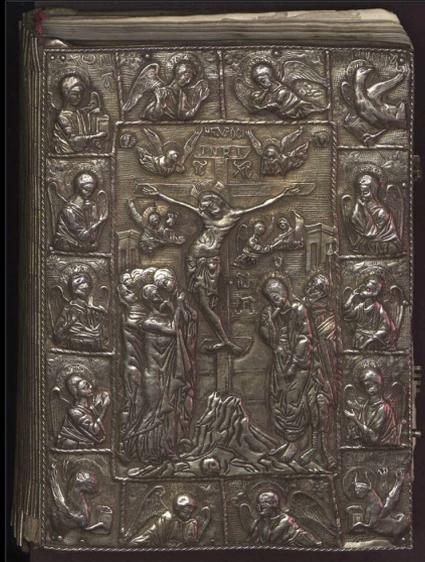


Περιεχόμενα Αποτελέσματα 1 - 5 από 5

Αρχή ← 1 → Τέλος

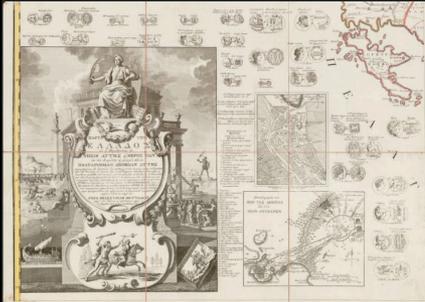


- Συλλογές
- Είδη τεκμηρίων
- Γλώσσες τεκμηρίων
- Πρόσωπα
- Συλλογικά Όργανα



Χειρόγραφα

Περιγραφή
Η συλλογή αποτελείται από ψηφιοποιημένα χειρόγραφα διαφόρων κατηγοριών (θεολογικά, μουσικά κ.λπ.). Σε αυτά περιλαμβάνονται μαθηματάρια των πρώτων ελληνικών σχολείων, βιβλία λειτουργικά και κοσμικά αλλά και κάθε είδους σημειώματα που διασώζουν στιγμές και εμπειρίες της καθημερινής ζωής.



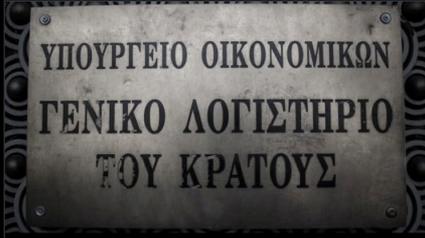
Χάρτες

Περιγραφή
Η συλλογή αποτελείται από ψηφιοποιημένα τεκμήρια χαρτογραφικών αποτυπώσεων που έχουν κυκλοφορήσει από Έλληνες και ξένους εκδότες. Τη συλλογή συνθέτουν σημαντικές εκδόσεις διαφόρων τύπων χαρτογραφικού υλικού, όπως, γεωγραφικοί, ναυτικοί, υδρογραφικοί, στρατιωτικοί χάρτες, σχέδια πόλεων κ.ά.

Χρονική κάλυψη
16ος αι. -

Κωδικός
100027

Τύπος
Συλλογή



Γενικό Λογιστήριο του Κράτους

Περιγραφή
Η συλλογή αποτελείται από ψηφιοποιημένα τεκμήρια οικονομικών καταστάσεων (προϋπολογισμοί, ισολογισμοί και απολογισμοί) του Ελληνικού Κράτους.

Χρονική κάλυψη
1823 -

Γεωγραφική κάλυψη
Ελλάδα

Κωδικός
2104346

Τύπος
Συλλογή



EBE Συλλογικός Κατάλογος Ελληνικών Βιβλιοθηκών NLG Greek Libraries Union Catalogue

Pilot project

Αναζήτηση στο Συλλογικό Κατάλογο

Όλα τα πεδία



Αναζήτηση

Σύνθετη

Αναζήτηση:

Περιορισμός αναζήτησης

Ίδρυμα	
Εθνική Βιβλιοθήκη	522.649
Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών	469.994
Πανεπιστήμιο Κύπρου - Ανοικτό Πανεπιστημίο Κύπρου	463.476

Suggested Topics σχετικά με την αναζήτησή σας.

History 107.128 Ιστορία 79.383 History and criticism 31.859 Philosophy 20.704
φιλοσοφία 20.082 Politics and government 19.985 Congresses 16.638 [περισσότερα ...](#)

Εμφανίζονται 1 - 20 Αποτελέσματα από 2.054.437 για την αναζήτηση '', χρόνος αναζήτησης: 0,556λ

Ταξινόμηση

Ανά σχε

Περιορισμός αποτελεσμάτων

Τρέχουσα αναζήτηση

Κριτήρια επέκτασης αναζήτησης

Αναζήτηση ισοδύναμων θεμάτων

Κριτήρια περιορισμού αναζήτησης

Διαθέσιμο από τη βιβλιοθήκη

Περιορισμός σε

Διαθέσιμο από τη βιβλιοθήκη

Μόνο κατάλογος

Πλήρες κείμενο

Από: Ημερομηνία έκδοσης Έως:



Εμφάνιση περισσότερων

1 - 30 from 307.808.918

Βαθμός συσχέτισης



RESEARCH STARTER

Fraternity by John Galsworthy.

Bianca Dallison had begun the chain of events by asking her writer husband to find a model for her painting "The Shadow." Through [περισσότερα](#)

Salem Press Encyclopedia of Literature

Άλλα θέματα: Framley Parsonage by Anthony Trollope., Fortitude by Hugh Walpole., File No. 113 by Émile Gaboriau.

1. Product Ownership of a Legacy Institutional Repository: A Case Study on Revitalizing an Aging S



Ακαδημαϊκό περιοδικό

By: Narlock, Mikala; Brower, Don. *Information Technology & Libraries*. 2021, Vol. 40 Issue 3, p1-10. 10p. DOI: 10.6017/ital.v40i3.13241 [Ultimate](#)

Θέματα: ONLINE information services; ACQUISITION of property; ACADEMIC libraries; USER interfaces; ORGANIZATIONAL goals; information; INTERPROFESSIONAL relations; QUALITY assurance; REFLECTION (Philosophy); Libraries and Archives



[Πλήρες κείμενο PDF](#) (1.7MB)

2. A Rapid Implementation of a Reserve Reading List Solution in Response to the COVID-19 Pandem



By: Black, Matthew; Powelson, Susan. *Information Technology & Libraries*. 2021, Vol. 40 Issue 3, p1-11. 11p. 2 Charts. DOI: 10.6017/ital.v40i3.13242 [Academic Search Ultimate](#)

Σαν Σήμερα... (Πρωτοσέλιδα 7ης Νοεμβρίου)

Ταχυδρόμος
07/11/1969

Σκριπ
07/11/1929

Ταχυδρόμος
07/11/1961

Ελευθερία
07/11/1944

Ριζοσπάστης
07/11/1946

Εμπρός
07/11/1905

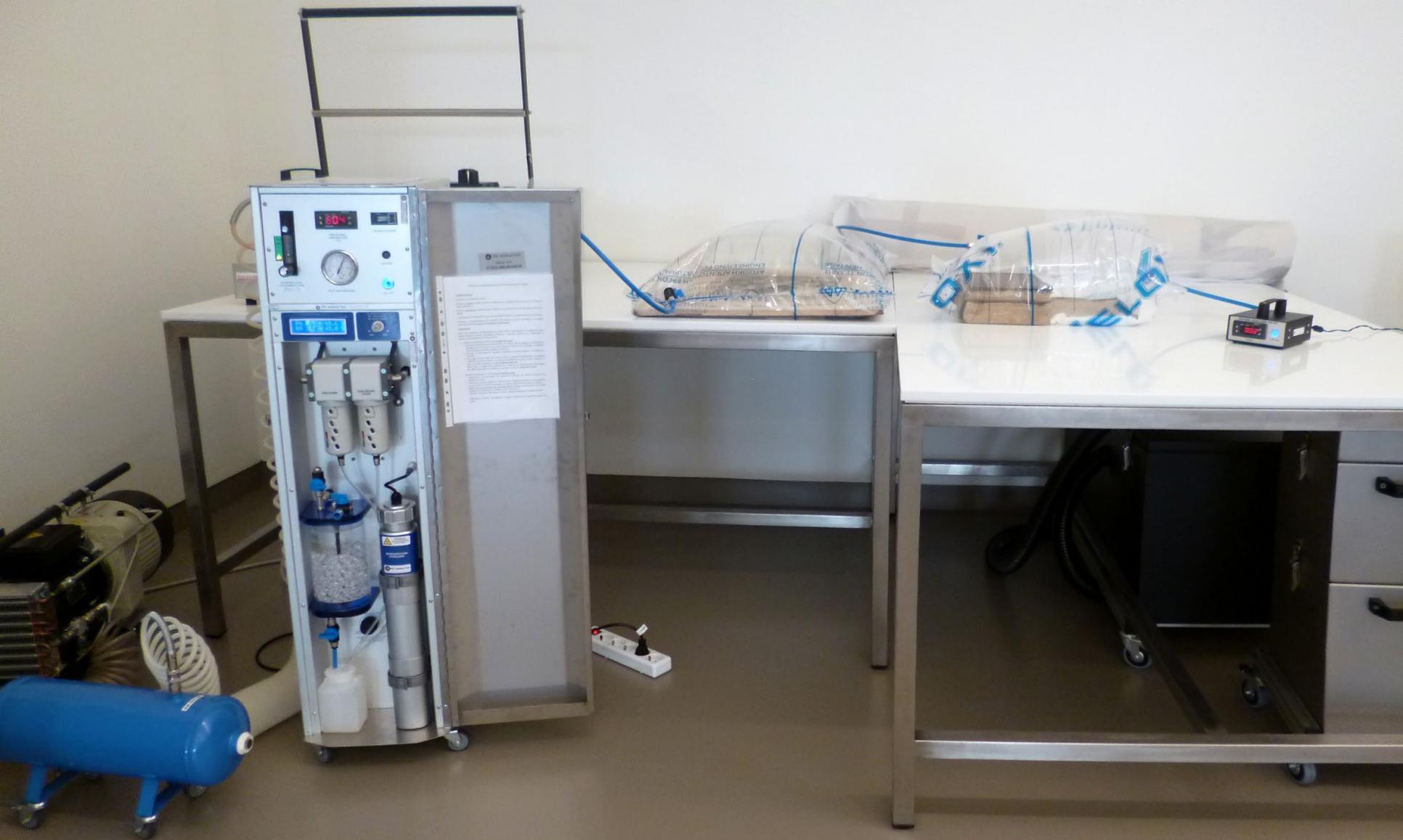
Ελευθερία
07/11/1962

Μακεδονία
07/11/1931

Σκριπ
07/11/1900

Ελευθερία
07/11/1950





The vertical stainless steel unit is a distillation or purification system. It features a control panel at the top with a digital display showing "80.4", a pressure gauge, and several indicator lights. Below the control panel, there are two vertical columns, likely containing reagents or catalysts, and a collection flask at the bottom. A blue gas cylinder is connected to the system. A power strip is plugged into the floor near the base of the unit.

Two large plastic bags, likely containing reagents or samples, are placed on the stainless steel table. The bags are labeled with "ATTO" and "EMERSON". A small black electronic device with a digital display is also on the table, connected to a power source.

A blue gas cylinder is positioned on the floor to the left of the main unit. It is connected to a network of white and blue hoses, which are part of the laboratory's gas supply system.







Καλώς
ήλθατε!



OBOT 2.0

TREVENTUS

CAN OBOT 2
MASS DIGITIZATION

Dark Side
On









Βιβλιοθήκες



Librarians - Information Scientists and the future

- The future of libraries is co-created by the collaboration of many
- People and organisations
- large and small
- old and new
- Aged and young
- prominent and humble
- recognizable and unknown
- but all of them have something in common that **characterises** them:
- they love what they doing
- Much more than those (a few, who belong to the past)
- who find the "stop" ready and so simply
- "get on the streetcar named ... the Future"

National Library of Greece

The **Future** is here
and for the **Present**
the **Past** has not yet been lost

