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DIGITAL REALITY AND BUSINESS EDUCATION

Usually people speak about gaining knowledge, but only a few of them think about the way to structure it. The aim of this work is to find the best way to restore gained comprehension within time based on the philosophical approaches and modern opportunities.

Keywords: *hypertext, Hegel, teaching material, educational knowledge*

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ЦИФРОВАЯ РЕАЛЬНОСТЬ И БИЗНЕС-ОБУЧЕНИЕ

Цель данной работы – найти наилучший способ структурирования знаний, чтобы восстановить достигнутое понимание во времени, исходя из философских подходов и современных возможностей.

Ключевые слова: *гипертекст, Гегель, учебный материал, образовательное знание*

Due to the COVID-19 epidemic at the Institute of Business at Belarusian State University, a significant part of the educational process has been switched to online mode. The lectures that teachers used to give in the classroom, writing down formulas and graphs on the blackboard, have moved to the Internet environment. During this year, the experience of organizing business education in a digital reality emerged.

Fixation of knowledge – how to effectively remember the material and restore it in case of need – is one of the tasks of a student in the process of any education is the. Usually, it is solved with the help of proper note-taking. Thanks to an outline after some time, it is easy to restore the forgotten knowledge.

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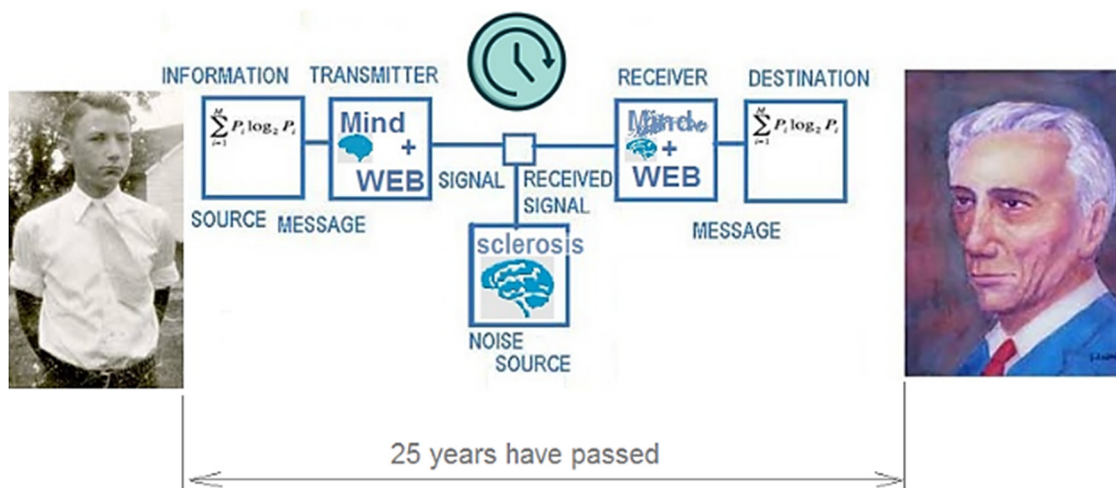


Fig. 1. The problem of transferring knowledge through the thickness of time

For example, the German philosopher Hegel, reading books, made «extensive extracts on separate sheets, which he lays out under headings: philology, aesthetics, physiognomy. arithmetic, geometry, psychology, history, theology, philosophy. Within each section there is an alphabetical order. Everything is arranged in folders with labels; thus, the necessary extract can be easily found. These folders will accompany him all his life» [1].

Another, later German philosopher – Max Scheler – introduces the concept of educational knowledge. This is knowledge – brought together in a single theoretical corpus. From Scheler's point of view, proper education must boil down to just that. He writes: «In the man „educated“ already in the becoming of any experience what is given in that experience is ordered into a meaningfully disentangled in images, forms and ranks the integrity of the world – into a microcosm, and things stand before him and his spirit in „form“, in a meaningful, noble, correct form, without himself being aware that he has given them form» [2].

When the text was replaced by hypertext, a text with hyperlinks that allows it to be linked to other texts, Hegel's method is not difficult to implement in the form of hypertext outlines.

Learning material is captured by students as hypertext html pages (although it is possible to use pdf pages or even MSWord pages). The structure of a hypertext knowledge system would be as follows (see table).

Comparison of paper and hypertext media

Media – paper	Media – Hypertext
On separate sheets – Extensive extracts of what was read, which are arranged by headings: 1) Aesthetics; 2) Philology; ...	Extracts in hypertext format, which are grouped under headings: 1) Philology\index.html; 2) Aesthetics\index.html; ...
Everything is stacked in folders with labels	Everything is filed in folders with labels. Each section has its own folder 1) Philology; 2) Aesthetics; ...
Within each section, there is an alphabetical order	Within each section, there is a glossary of internal references (bookmark references) in alphabetical order
Everything is arranged in folders with labels; thus, the necessary extract can be easily found	All topics within a heading have internal anchors pointed to by internal hyperlinks; thus, the desired excerpt can be easily found
These folders will accompany us all our life	The site, placed on the Internet, will be available to a person for a long time, and from different devices – mobile, desktop, etc.

Creating such an outline helps the student to consolidate knowledge into a single theoretical corpus, which is important for quality learning in understanding classical German philosophy (Hegel, Scheler, etc.) – see Fig. 2 [4].

This is an advantage over the traditional placement of teaching material, which is practiced in Western universities – which can be designated as week-oriented (Fig. 3 [3]).

atsarik.gear.host/4/index.html

Hegel Page

- [Artificial intelligence \(AI\)](#)
- [Balmer Peak as Synthesis](#)
- [Factorial](#)
- [Fibonacci numbers](#)
- [Logic based AI](#)
- [Prolog](#)
- [Recursion](#)
- [Turing test](#)
- [Mathematical Theory of Communication \(MTC\)](#)
- [First-order approximation](#)
- [Hamming code](#)
- [Hartley's Information Measure](#)
- [Introduction to Information Theory](#)
- [Mathematical Theory of Communication by C.E. Shannon](#)
- [Pascal's triangle](#)
- [Repetition code](#)
- [Second-order approximation](#)
- [Shannon entropy](#)
- [Third-order approximation](#)
- [Transmit data](#)

Factorial Formula

$$n! = n \times (n - 1) \times (n - 2) \times \dots \times 1$$

$0! = 1$
 $1! = 1$
 $2! = 2 \times 1 = 2$
 $3! = 3 \times 2 \times 1 = 6$
 $4! = 4 \times 3 \times 2 \times 1 = 24$
 $5! = 5 \times 4 \times 3 \times 2 \times 1 = 120$

Combination Formula

A combination is a grouping or subset of items. For a combination, the order does not matter.

$$C(n, r) = {}^nC_r = \frac{n!}{(n-r)!r!}$$

Number of items in set: n
Number of items selected from the set: r

FRUIT COMBOS

$C(3, 2) = {}^3C_2 = \frac{3!}{(3-2)!2!} = 3$

Fig. 2. Website of the Information Theory course by Anastasiya Tsarik

cs50.harvard.edu/college/2023/spring/notes/7/#html

This is CS50

Harvard College
Spring 2023

Search

Feedback from past students

Ed Discussion
Visual Studio Code

Week 0 Scratch
Week 1 C
Week 2 Arrays
Week 3 Algorithms
Week 4 Memory
Week 5 Data Structures
Week 6 Python
Week 7 SQL

Lecture 7

- [Welcome!](#)
- [Flat-File Database](#)
- [Relational Databases](#)
- [IMDb](#)
- [JSONs](#)
- [Indexes](#)
- [Using SQL in Python](#)
- [Race Conditions](#)
- [SQL Injection Attacks](#)
- [Summing Up](#)

Welcome!

- In previous weeks, we introduced you to Python, a high-level programming language that utilized the same building blocks we learned in C.
- This week, we will be continuing more syntax related to Python.
- Further, we will be integrating this knowledge with data.
- Finally, we will be discussing SQL or Structured Query Language.
- Overall, one of the goals of this course is to learn to program generally – not simply

Fig. 3. Website of the CS50 course at Harvard University

For organizing the learning process week-oriented system is convenient, but not for preserving knowledge through the thick of time. What difference does it make to the formation of educational knowledge whether the DOM Events section was studied in March or February?

Mentioned above Max Scheler writes: «Knowledge that has become educational is knowledge that no longer remains in us as if undigested, knowledge that is not thought about how it came to be or where it came from. Goethe described it wittily and correctly when, in one lovely poem, he says in

regard to „originals“ that he now no longer knows what fried geese and ducks he has fattened his tummy with!» [2].

It is educational knowledge is the essence of a phenomenon or scientific concept: when it emerged and is assimilated is another matter. The paradigm of learning is finally shifting toward understanding rather than memorization, and it is this paradigm that corresponds to the realities of the 21st millennium.

Summarizing what has been said, with access to the Internet, the structure of educational knowledge, forgotten over time, is restored to memory within minutes or even seconds.

References

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