Uniwersytet Komisji Edukacji Narodowej w Krakowie

Krakowskie Forum AI w Edukacji

Od badań do praktyki szkolnej

Kraków

23–24 November 2026 / Kraków

Ludzka i sztuczna inteligencja. Jak uniknąć dominacji i dalszego ulegania pokusie antropomorfizacji?



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Uniwersytet Łódzki

With support from the City of Kraków and the Erasmus+ SmartStart Teacher Academy

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HI and AI: How to avoid the domination and further seduction of anthropomorphisation?



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Plan of the presentation

Introduction: AI as One of the Challenges in the Time of Change

Part 1: Understanding HI and AI: A Pedagogical Perspective

Part 2: Section of Anthropomorphisation: Machines and Robots

Part 3: Section of Anthropomorphisation: AI Terminology

Conclusions

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Introduction

AI as One of the Challenges in the Time of Change



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We, as humanity, need to interpret the **great trends of our time, particularly technological advances**.

- In recent years, it has become increasingly evident how rapidly and profoundly **digitalisation, artificial intelligence (AI) and robotics are transforming our world**.
- Technology should **not be considered as a force antagonistic** to humanity.
- **Technology** is a **part of our history** since the beginning as **“a profoundly human reality, linked to the autonomy and freedom of man.”** (Benedict XVI, 2009).
- Over the centuries, technological development has significantly **improved the living conditions of humanity.**
- Each phase of progress has also revealed the **ambiguity of tools that can cause harm when not oriented toward the good** (like Alfred Nobel, who invented dynamite in 1867 - among over 350 other inventions; wishing not to be remembered as “A merchant of death”, he dedicated his fortune (1895) to create a series of prizes for those who confer the “greatest benefit on mankind” in physics, chemistry, physiology, medicine, literature, and peace).

Encyclical Letter of His Holiness **Pope Leo XIV, *Magnifica Humanitas: On Safeguarding the Human Person in the Time of Artificial Intelligence***
[*Wspaniałe człowieczeństwo. W trosce o osobę ludzką w dobie sztucznej inteligencji*] (15 May 2026)

Crucial Questions:

- Where are we going?
- Toward what goal do we wish to orient ourselves?
- What direction should we choose as a people and as a human community?

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We find ourselves facing a new situation

- The power and prevalence of emerging **technologies are interwoven into the fabric of daily life** (shaping decision-making processes and deeply affecting the collective imagination).
- New technologies **open up a horizon** extending in directions that are imaginable but not yet fully predictable.

BUT:

- Their potential impact and the long-term results **may affect individual dignity and the common good**.

Remaining human: Relationship with AI

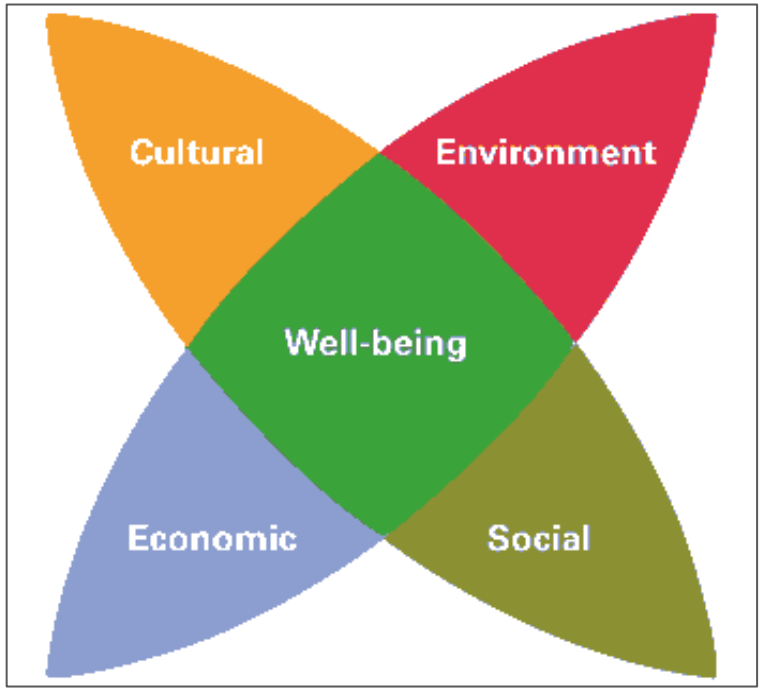
- What about the case of **building a relationship with AI**? Do humans agree (consciously or unconsciously) to be **manipulated and to follow new trends** (read: external pressure to fully accept novelty), or do they choose (should choose) **the evolving relationship between humans and AI technologies on their terms** (the former)?

- In the era of AI, when **new forms of dehumanisation** threaten human dignity, it should be our **pressing duty to remain profoundly human**.

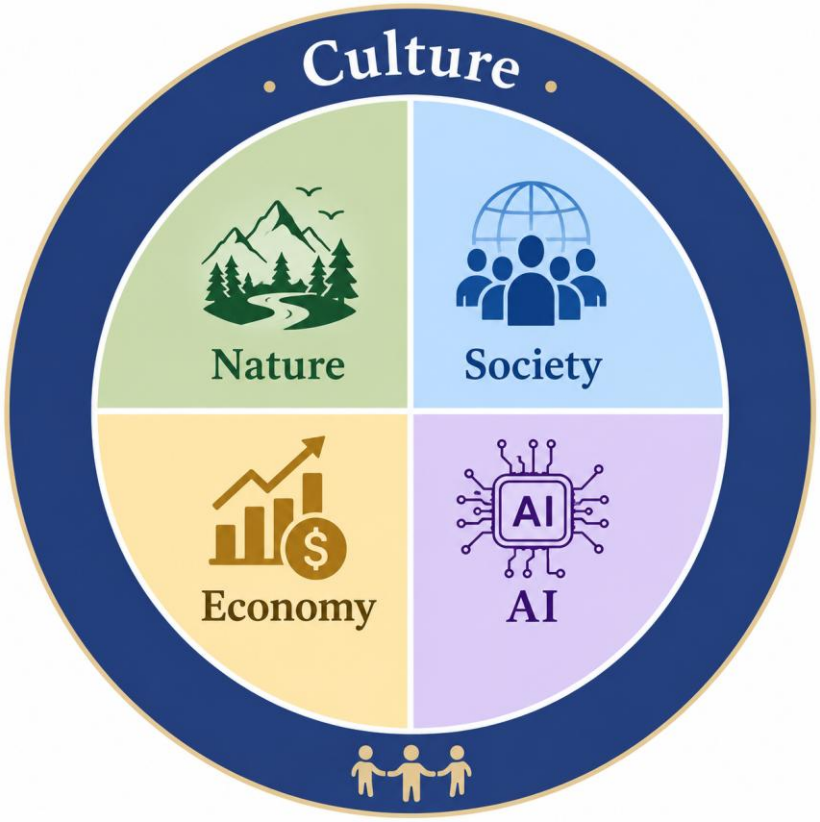
- True **progress and development** always stem from **being open to others**, using **intelligence willing to listen** and **a will that seeks what unites** rather than what separates.

- At the same time, using **tools** (including very advanced ones), as a **result of human thought**, creativity, prudence, perseverance, and engagement, **broadens development** and adds new, unprecedented **dimensions and destinations**.

- **Culture: an extraordinary human power that makes us responsible and emotional persons, not heartless creatures/beings/beasts**
- **Culture: a backdrop/context and foundation of humanity**

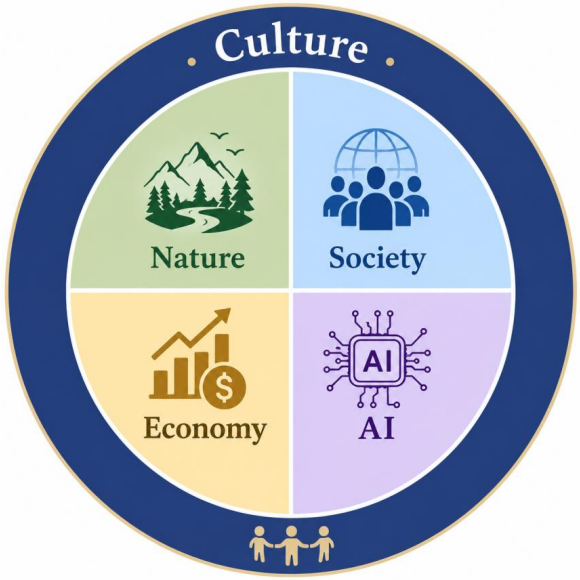


The Four Pillars of Sustainable Development
Culture as a remedy for the multi-level state of life devastation



Visual generated by AI (ChatGPT)

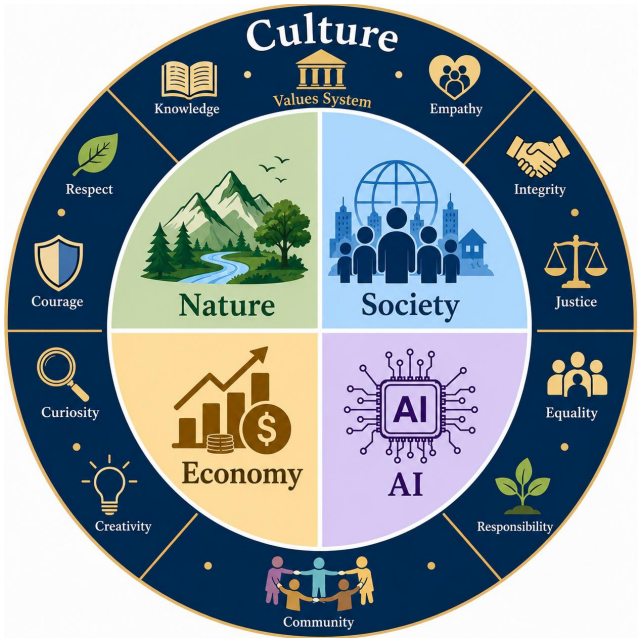
5 pillars of SD with Culture as the foundation and cornerstone of all human activity



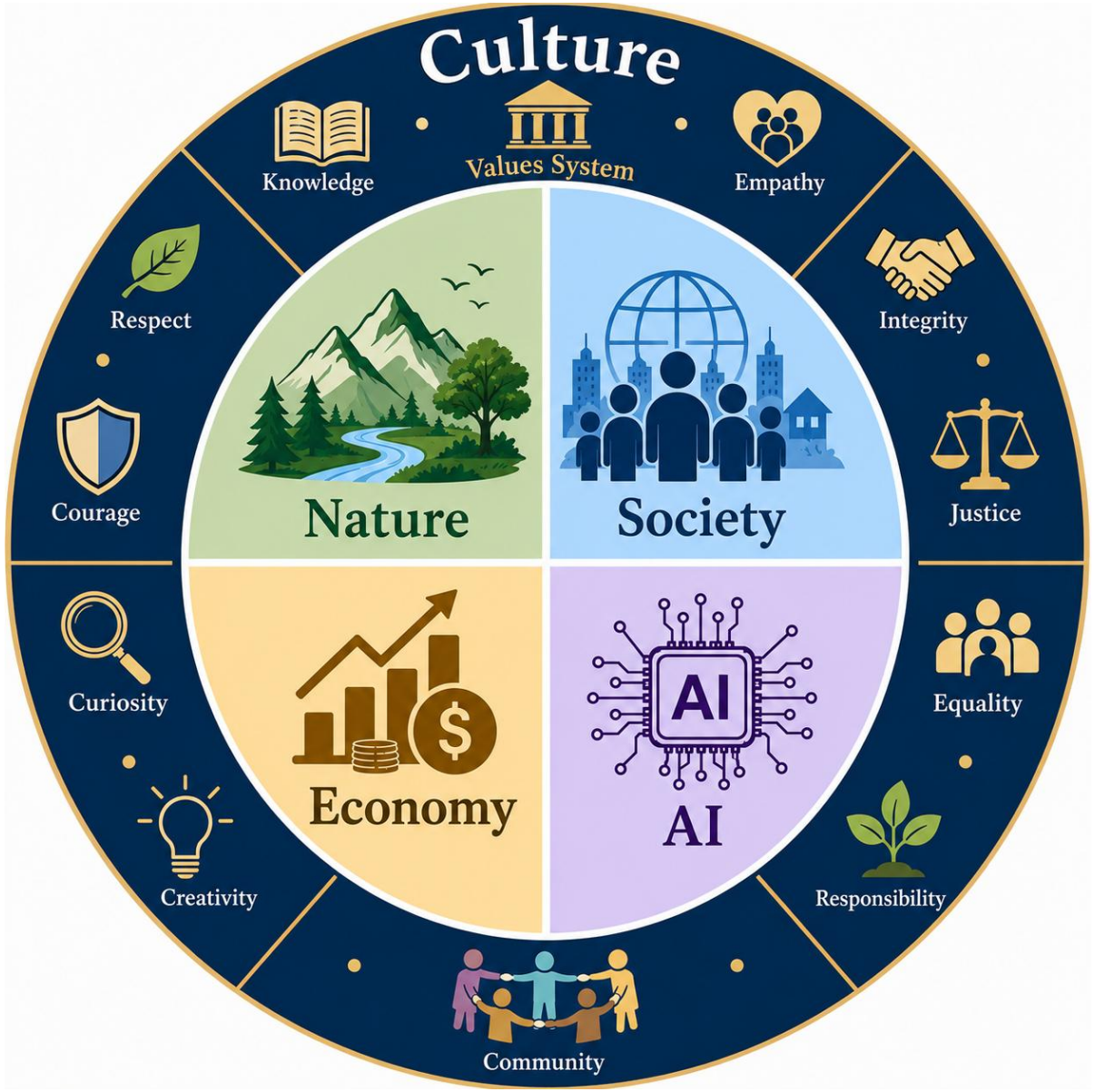
Culture (embracing other pillars): general visual



Culture as art



Culture as an axiological environment (source of ethics and moral behaviour, source of life assessment, vision and practice of education)



Visual generated by AI (ChatGPT)

Value system/list by AI

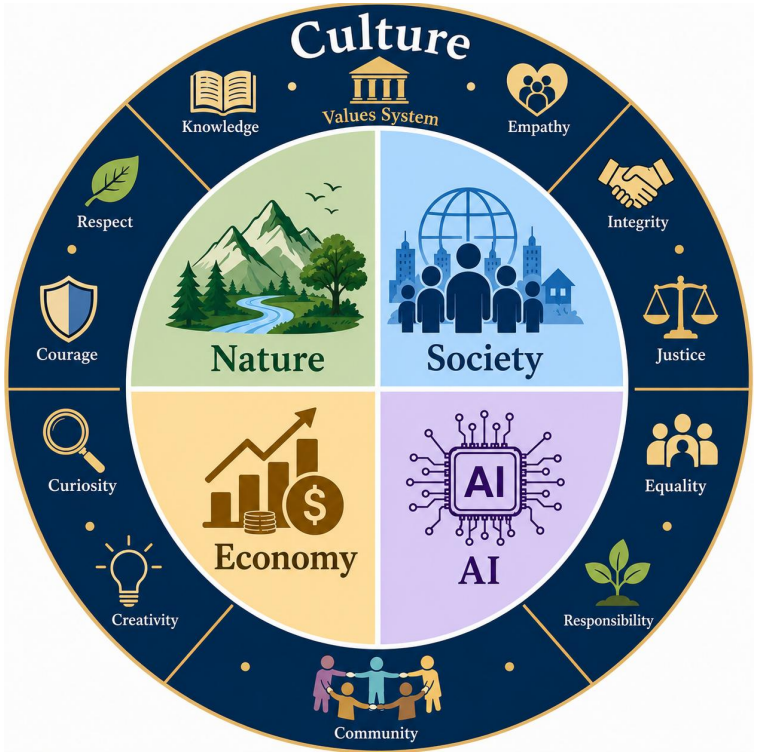
Empathy
Integrity
Justice
Equality
Responsibility
Community
Creativity
Curiosity
Courage
Respect
Knowledge

Place and state of education as part of culture.

Education: a practice in constant flux

- Today, **AI is transforming how we teach and learn**.
- A few years ago (during COVID-19), it was **online teaching** that **reshaped classrooms** worldwide.
- Therefore, teaching and learning are **phenomena in continual evolution**, where new theories like **transformative learning** (Jack Mezirow) and **connectivism** (George Siemens, Stephen Downes) are **reshaping the roles of teachers** and **expectations formed toward students**.
- Furthermore, **new agents** of the shift are 'coming to the fore': **humans and technologies**. Do they **tend to become equal**? Or is there some "force" projecting to make them equal? Or maybe one side is meant to build a balanced "relationship" that **prevails over the other**?
- Thus, in an educational environment **between humans and non-humans**, it is indispensable to **mark out and define boundaries**.

Nature as an object of our concern and anxiety. A growing awareness of the need to care for it, to help, to restore and preserve endangered species, and a new approach to Nature – not merely as a source of raw materials, but as a collective good with many dimensions.



Society as an aspect of human life that requires a return to building, rebuilding and maintaining interpersonal relationships based on a sense of community, sincere and deep bonds, a desire for mutual understanding and getting to know one another, and the building of honest and lasting relationships. A responsible, anticipatory openness toward the Other.

AI-?

The economy offers the chance of a decent and dignified life, where work is properly remunerated, and income differences do not create living-standard disparities unworthy of human beings. Human dignity is not undermined. Everyone has the right to happiness and to a future that fosters it, regardless of their income. On a macro scale, international economic collaboration prevails over domination, rivalry and economic coercion.

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Part 1
Understanding HI and AI: a pedagogical perspective



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Man, humanity, the limits of humanity

‘Humanity’ can be considered in terms of the **1. meaning of human existence** and **2. crossing boundaries** (Lipiec, 2009).

1. The meaning of human existence:

- **Self-awareness** – full, reflective self-awareness; awareness as an ontological necessity
- **Subjective control over one’s own existence and the shaping of one’s own world**
- **The question of human rights in relation to oneself and the world**: shaping one’s own **destiny** (personal, collective, species-wide), the **right to change, transform and improve the world** (in terms of civilisation, political systems and everyday existence), and the question of **the right to improve oneself as a species** (through **culture and biological interventions**).

Man, humanity, the limits of humanity

2. Crossing boundaries:

- **Ethical obstacles** (e.g. in medical practice) – the accumulation of experiences from a previous era – breaking down culturally entrenched rules and prohibitions in the 'immediate aftermath'
- **Tolerance of quiet and hypocritical moral indifference** – official condemnation, yet a perceptible, unquestioned benefit and tacit approval
- **The right to a future** – understood as addressing challenges 'today' before future generations are forced to do so. **Consent to 'go further' entails an attitude of acceptance towards the deliberate breaking of existing rules and regulations**.

Human intelligence

The word **intelligence** derives from the Latin noun *intelligentia*, which comes from the verb *intelligere*, meaning "**to comprehend**" (Berges-Puyó, 2025).

- How do we want to understand our world?
- How broadly are we able to do it?
- How do we want to treat the environments we live in and co-create?

Human intelligence – UNESCO definition

Human intelligence is the **complex ability of individuals to learn, reason, solve problems, and adapt to new situations**. It encompasses **cognitive functions such as perception, memory, and decision-making**, and is a central focus in fields like **psychology and the social sciences**. **Ethical considerations** in neurotechnology also explore the implications of enhancing or modifying human intelligence.

Human intelligence as a part of humanity

Thus, what does it mean to be human?

- From the perspective of a holistic view of being human, the core of being human is the "**spiritual heart"**, the essential element and link that **connects body, mind, and soul** (Anderson, 2020; Berges-Puyó, 2025; Deikman, 1998).
- The spiritual heart's essence is **kindness, compassion, hope, community, gratitude, humility, wisdom, intuition, peace, courage, and interconnectedness**.
- As a consequence, we can define **Human Intelligence as the capacity guided by the spiritual heart** (its elements) to **adapt to new contexts or circumstances**.

Human intelligence from a pedagogical perspective (to implement in educational practice)

- **Behavioural approach** (psychological), **decontextualised** (but with limitations of standardised tests)

- **Cultural approach** (cultural intelligence) (Earley & Ang, 2003) – different approaches stemming from cultural/spiritual/ and social background (normative intelligence), **deeply contextualised**. The specific ability to adapt and work effectively in multicultural settings. Cultural Quotient (CQ) refers to the ability to navigate a multicultural environment. It includes four key dimensions:
  - **Metacognitive CQ:** Being aware of your own cultural biases and adjusting your thinking during an interaction.
  - **Cognitive CQ:** Understanding how cultures differ regarding rules, values, and norms.
  - **Motivational CQ:** Having the drive and interest to engage with people from different backgrounds.
  - **Behavioural CQ:** Changing your verbal and nonverbal actions to fit new cultural environments.

- **Ethics/axiological approach** (moral intelligence), **deeply contextualised**.
- **Emotions/emotional approach** (emotional intelligence), **deeply contextualised**.

Artificial Intelligence: characteristics and description

- It is **not possible to provide a single, comprehensive definition of AI**.
- AI is **not the same type of "intelligence"** as that of human beings.
- AI systems merely **imitate certain functions of human intelligence**.
- In doing so, they often **surpass** human intelligence **in speed and computational capacity**, offering tangible benefits across many fields.
- Yet this power remains **entirely tied to data processing**.

Artificial Intelligence: characteristics and description. A lack of cultural ability

- Artificial Intelligences **do not undergo experiences**, do **not possess a body**, do **not feel joy or pain**, do **not mature through relationships** and do not know from within (their experience) **what love, work, friendship, or responsibility mean**.
- Nor do they have a **moral conscience**, since they **do not judge good and evil**, **grasp the ultimate meaning of situations**, or **bear responsibility for consequences**.

Artificial Intelligence: characteristics and description. “Learning” that is not learning

- They may **imitate** language, behaviour, and analytical skills, or even **simulate** empathy and understanding
- But they **lack the affective, relational and spiritual perspective** through which human beings grow in **wisdom**.
- Even when these tools are described as capable of **“learning,”** their way of doing so is **different** from that of a human person.
- It is **not the experience** of those who allow themselves to be shaped by life and grow over time through choices, mistakes, forgiveness and fidelity.
- Rather, it is **a form of statistical adaptation** based on **data and feedback**, which can be **very effective, but does not imply inner growth**.

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Part 2
Seduction of Anthropomorphisation: Machines and Robots



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From Ancient Greek Robots (*automata*) to AI Humanoid Robots



Talos, a gigantic humanoid ‘being’ with the innards of a machine

The idea of **artificial beings appeared in Greek mythology** long before the first automata were ever constructed.

In **Homer’s *Iliad***, the god **Hephaestus**, the divine craftsman, is assisted by a group of **golden attendants (mechanical statues)**. By Homer, they possess intelligence, speech and strength. **They were not born but made.**

Hephaestus was also credited with creating golden and silver **mechanical dogs** whose task was to protect the island of Crete, and **Talos, a gigantic bronze guardian of the terrain**.

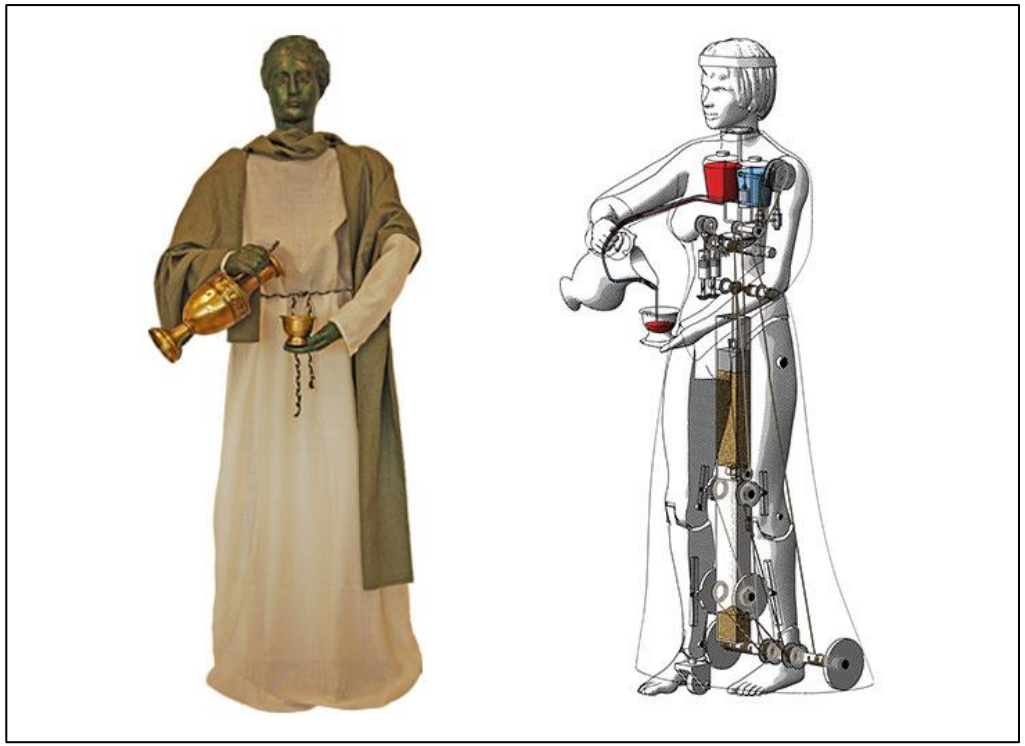
From Ancient Greek Robots (*automata*) to AI Humanoid Robots



The Talos Vase, an Attic red-figure krater from Ruvo di Puglia, Italy. Clay; ca. 400-390 BC

Talos patrolled the coastline of Crete and protected the island from hostile ships by hurling stones at them.
He was said to have a **single vein** running through his body, carrying a divine fluid (ethereal and golden) called ***ichor, the blood of the gods***.
When the vein was pierced, the giant collapsed and perished.





Replica of the automatic **servant female of Philon (3rd c. BC)**. Reconstruction by Kóstas Kotsanás using information found in Philon of Byzantium's book "Pneumatics“ (part of the opera *Mechanike syntaxis*).
This automaton **automatically poured wine and mixed it with water when a cup was placed in its right hand**. The machine uses water, weight and the laws of equilibrium.
Museum of ancient Greek technology, displayed in the Heraklion building (Crete) in July 2022.



Pouring **wine servant of Philon**, ancient automaton, **250 BC.**



Sophia, **a humanoid robot**, activated in **2016** and made her first public appearance. Manufactured by Henson Robotics Company in Hong Kong. Inventor: David Henson. The face was modelled after Queen Nefertiti, Audrey Hepburn, and the inventor's wife, Amanda.



Clara – artificial friend
"Clara and the Sun" (**2026**), a film by Taika Waititi, an adaptation of Kazuo Ishiguro's sci-fi drama novel (2021). Clara – Jenna Ortega.

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Part 3
Seduction of Anthropomorphisation: AI Terminology



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Anthropomorphisation of AI in language and communication

- Inaccurate/misleading terms, as it anthropomorphises mathematical language and operations
- Equal humans and machines, or more abstract Large Language Models (LLMs)
- Human being: the subject or object of the algorithms' operation?
- Borders and limits of AI development
- Destabilisation, manipulation, undermining of order (questioning the order)
- AI development is ahead of the existing rules and tests our resilience

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A new dictionary of AI-related terms and phrases



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A new dictionary of AI-related terms and phrases

Terminology: referring to humans and applied to AI	Term adequate for machinery "language"
Learning ability	Acquiring data assets, operating, processing
Learning	Training
Creativity	Generates, joins, combines, puts together in a new way, mimics novelty
Decision making	Selecting options as programmed, presenting the outcomes
Thinking	Processing, searching
Asking (questions)	Giving instructions and entering commands
Communication	Schematic response, "smart reply", automatic response, sharing data, exchange of data, proper/programmed reaction to a specific row of words

A new dictionary of AI-related terms and phrases

Terminology: referring to humans and applied to AI	Human Intelligence (description)	Artificial Intelligence (description)	Term adequate for machinery "language"
Learning ability	Learns from content, experience, emotions, context, and real-world understanding	Acquires data assets from data, algorithms, and patterns identified during training	**Acquiring data assets, operating, processing**
Learning	LLL as an individual and socio-cultural process (extended over time)	Enabling access to various amounts of data. Dependent on the data it has been trained on	**Training**
Creativity	Highly creative and imaginative, shaped by experience, emotion and intention, free will and spirit	Can generate creative-looking outputs, but is mainly based on acquired patterns and existing data	**Generates, joins, combines, puts together in a new way, mimics novelty**
Decision making	Influenced by knowledge, ethics, emotions, judgment, experience, and social context and norms; by culture, religion, tradition, worldviews	Based on data, models, probabilities, and defined objectives; acting according to introduced solutions emerging from the programmer's intentions	**Selecting options as programmed, presenting the outcomes**
Thinking	Humans have consciousness, personal experience, emotions and common sense	AI can copy some parts of human thinking, such as recognising patterns, and thus answering questions, writing text	**Processing, searching**

A new dictionary of AI-related terms and phrases

Asking (questions)	**In the narrow sense, 'to ask' means to request information from someone, to seek answers in available sources, and to analyse reality (including historical reality). In the broadest sense, it refers to any activity of the human mind that seeks to discover, verify and gain a deeper understanding of something. A question as a symbol of a broader attitude or various behaviours, e.g. seeking and investigating, questioning the status quo, expressing curiosity, artistic expression, and dialogue with oneself**	**Human beings are "forced" /encouraged to: formulate prompts (better: short and simple, concrete, unambiguous, without expecting a valuation).**	**Giving instructions and entering commands**
Communication	The creation and exchange of meaning between living beings through messages influenced by context, cultural patterns, and feedback; the use of language (verbal, nonverbal messages) is equally understandable to both the sender and the receiver.	1) AI-Mediated Communication (AI-MC): interpersonal communication between humans where AI tools shape or co-author the content (like grammar correctors); 2) Human-AI Communication: direct interaction between a human user and an AI system (like prompts for a chatbot, voice commands to a virtual assistant); 3) AI-to-AI communication: the exchange of data, instructions, and feedback between two or more independent AI systems (like multi-agent autonomous software networks sharing data)	**Schematic response, "smart reply", automatic response, sharing data, exchange of data, proper/programmed reaction to a specific row of words**

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Conclusion



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How to avoid the domination and further seduction of anthropomorphisation?
The reason for the whole change

- I believe that **humankind is not a former/past (?) and weaker 'link' in the chain of living and artificial beings but remains an agent and a driver of change and self-development.**

- As our world and social reality are **undergoing enormous changes**, we need to understand that **we are a crucial part of them**: we are the reason, source, implementer, and "consequenter" - a person who bears the consequences of their actions.

- It means our **collective engagement in striving for the common good** (meaning human good) is fundamental, as it is precisely we, as human beings, **who are responsible** for the exponentially accelerating novelties, referring, in that presentation, to AI technologies and diverse social attitudes towards them.

How to avoid the domination and further seduction of anthropomorphisation? AI literacy

- To make it practically possible, AI literacy should become an **obligatory course in all forms of education**, at **every level and specialisation**.

- AI literacy does not mean being only smart at using/implementing new technologies, apps, and technical solutions. Primarily, it refers to our **axiological knowledge and reflective attitude towards moral intentions**, forming the **basis of the AI technological stream and solutions**. Those who have the power (intellectual, financial, and political) and the means to work on AI development (IT specialists) should act transparently.

- As history to date teaches us, those who possess assets want to impose their solutions on others. In that context**, AI literacy should refer to educating people to resist manipulation, develop divergent thinking, and develop the ability to pose essential and relevant questions**.

How to avoid the domination and further seduction of anthropomorphisation? Axiological System

- Our **humanity is built on or rooted in the axiological layer** of social and individual life, which is the **grid for our cultural world, life, and expression**.

- **Throughout history**, people, nations, empires, etc. have **"agreed" on or worked out different systems of values and norms to become their net for cultural behaviour**, such as building relationships with others, forming social, political, economic and intercultural goals, developing worldviews, or expressing themselves in various activities (e.g., science).

- Now, in the time of unprecedented shift and flow, **we need to slow down a little and sketch a map of human position in relation to other "objects,"** living and material, that fill our common world.

- Such **a visualisation** should help us understand the importance of **responsible human behaviour in the multiplier environment**. Our decisions, attitudes, and governance should demonstrate that **humans must oversee machines**.

How to avoid the domination and further seduction of anthropomorphisation?
Human as a responsible subject

- A **human being has to be the subject, not an object or target** of algorithmic operations and processes.

- **AI cannot overtake decision processes**. Humans, as fully intelligent beings, have to define and insist on the scope within which AI operates autonomously (and that we allow AI to do so), and where it must be **entirely dependent on human decisions**.

- Those arguments need time; that's why the slowdown in AI development is crucial. To make coexistence between humans and advanced technologies possible, we have to prepare, meaning **educate ourselves multidimensionally.** Humans **must know how to verify the effects of AI's outcomes** (e.g., **what is true and what is the effect of AI hallucinations**).

How to avoid the domination and further seduction of anthropomorphisation? Boundaries

- A safe and beneficial relationship between humans and AI requires **clearly defined boundaries**. It is not even so “light” as pushing the border between humans and animals (anthropomorphising pets by buying them fancy clothes, necklaces or scarves, or equipping them with strollers).

- **Anthropomorphising machines, or even invisible digital processes**, is dangerous in its fundamental essence. Not to fall into **the illusion of being engaged in partner relationships**, a **distinction between AI and intelligent humans is absolutely necessary**.

- It means we should expect and **democratically “force” the AI and social decision-makers to change the terminology characterising the AI reality and sphere**. We should implement a new **AI dictionary** not to communicate precisely with AI Large Language Models (LLMs) or their next generations, but **to let us humans perceive that we give orders and expect results from machines**. When needed, we switch to the language of that technology and use professional terminology to address the issues we are interested in. **The contemporary practice of intermingling two realities and using the same language is false.**

How to avoid the domination and further seduction of anthropomorphisation?
The superiority of HI over AI

- **AI mimics only a part** of human intelligence and humanity; thus, **they are not an equal entities**.

- Though a human being is not so quick at analysing piles of data or counting, **human thought is the quickest tool** known to us and used by us.

- A human being is **culturally embedded, expresses emotions**, and may **show their strengths, empathy, or weaknesses**. People may **laugh or cry, feel and independently develop**. Fostering those abilities is **our duty**.
- **AI is a fantastic tool to help us** enhance our development, but it must be used wisely. Then, new **possibilities, aspirations, and dreams can arise in human lives**. Just as in the past, the car has become a common means of transport, new realms of human activities and interests have become accessible, right at our fingertips. Now, returning to AI issues, new workplaces and occupations (as well as new areas of education and training) may become a reality for humans.

How to avoid the domination and further seduction of anthropomorphisation? Fidelity to Culture and Education

- **Our development influences the cultural one**. Gaining experience, expanding cultural background and horizons, and deepening cultural heritage make it possible for a safe and passionate human existence.

- I'm sure **we may coexist with AI models** and their "world" together with the outcome of our human thought, creativity, infinite imagination and agency.

- Therefore, to **avoid getting lost** in the AI reality and to achieve AI literacy, **humans need responsible, culturally embedded education**. Showing **differences between us and the machines** and constantly nurturing those differences with a rational approach (not allowing them to intermingle or lose our human awareness) is a fundamental educational goal to be implemented as quickly and deeply as possible.

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Thank you

Questions and discussion



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