FOSTERING A CULTURE OF RESPONSIBLE USE OF ARTIFICIAL INTELLIGENCE THROUGH CO-REGULATION

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If we accept the premise that energy and information are the foundational elements of the world, as reflected in the two groundbreaking 20th-century formulas – Einstein's $E=mc^2$ and John Wheeler's "it from bit" [1] – it becomes evident why mastering these elements offers humanity existential opportunities as well as threats. This duality was highlighted by two Nobel laureates almost 90 years apart: Frédéric Joliot in 1935 warned of the dangers of nuclear energy [2], while Geoffrey Hinton reiterated similar concerns regarding AI in 2024 [3].

Simultaneously, the key role in transforming energy and information lies with psychological agents – primarily individuals and humanity as a collective subject. Throughout its history, humanity has developed numerous tools to mitigate existential threats and amplify opportunities, such as religion, **culture**, politics, economics, and **law**. The guiding principles for these tools are rooted in **meanings** that manifest through values, motives, needs, and goals – collectively forming the dispositional core of personality. While culture addresses universal human values, economics emphasizes sustainable development goals, and law focuses on human rights, democracy, and the rule of law.

As noted by M. Kozubra, 'Legislation is not law but merely a necessary tool and guide for its application in specific legal situations' [4, c. 463]. Unsurprisingly, 2024 marks the adoption of significant regulatory acts, including the EU AI Act [5] and the Council of Europe's Framework Convention on Artificial Intelligence, Human Rights, Democracy, and the Rule of Law [6]. The Convention's title explicitly reflects three supreme values recognized as universal and intrinsic to the essence of law.

Additionally, 2024 has seen the development of numerous co-regulation and self-regulation instruments. At the EU level, these include the General-Purpose AI Code of Practice [7], while in Ukraine, Guidelines on Responsible Use of AI in media [8], advertising and marketing communications [9], education [10], personal data [11], intellectual property rights [12], and the Declaration on Self-Regulation in the Field of AI [13] have developed. These documents belong to the realm of 'soft law,' focusing on fostering a culture of responsible AI use through values and meanings rather than through sanctions or incentives.

In psychology, motivation is classified as either internal or external, with a constant interplay between the two. **Increasing external motivation often diminishes internal motivation.** Internal motivation, being rooted in the dispositional core of a person, is stable. In contrast, **external motivation** relies on external stimuli – positive or negative – rendering it volatile and **susceptible to**

inflation [14]. This inherent issue is illustrated by comparing the effectiveness of mobilization in Ukraine, driven by patriotic feelings (internal motivation) during the early months of war, to later stages, where sanctions and financial incentives for military service (external motivation) became the primary tools of influence.

Thus, when discussing soft versus hard law and legal culture versus legislation, the focus shifts to fostering internal motivation driven by values rather than external influences such as severe penalties or incentives. Notably, psychological research indicates that **positive stimuli (dopamine-driven motivation) are generally more effective than negative stimuli (cortisol-driven motivation)**.

Of course, while internal motivation may wane over time, its delegation to external tools (including hard legal norms) is necessary; vice versa, the inefficacy of external motivation (as laws fail to work) demands a return to meanings and values underpinning internal motivation. Therefore, the sustainable functioning of society requires an organic combination and mutual evolution of soft and hard law instruments. It is essential to recognize that international legal instruments primarily reflect internal motivation (meanings, values, and goals), while national legislation translates these instruments into external motivation through sanctions and incentives.

The development of AI encourages a rethinking of numerous questions rooted in psychology. AI enables humans to delegate an increasing volume of routine tasks – from idea generation to their implementation in virtual and physical environments. This shift positions humans as decision-makers, choosing which ideas to actualize. This act of **choice (a "deed"** in psychological terms [15]) becomes an act of pure creativity, often carrying moral, ethical, and material consequences for which **human must accept (appropriate) responsibility** – be it positive (e.g., income) or negative (e.g., penalties).

Thus, **the qualitative transformation of the chain "idea – choice – delegation – appropriation/alienation of results – responsibility,"** with AI involved at every stage, necessitates the revision of numerous legal concepts, including:

1. **In intellectual property law:**
   - The notion of **the concept of "work"**: Should ideas (currently excluded from protection under Article 7(3) of the Ukrainian Law on Copyright and Related Rights [16]) receive protection, and to what extent?
   - **Can the human act of choice and further realizing an idea with usage of AI systems be recognized as act of creation (act of art)?** Current laws differentiate between AI-generated objects and works created with AI assistance (AI-assisted), but clear criteria for distinction are absent. It is likely that this boundary will shift towards **evaluating the number of subjective choices** required to realize an idea.
2. **In civil law:**
   - Defining **digital personality, digital identity, and the legal status of new types of agents** (e.g., OpenAI's planned launch of AI agents who will use the computer on behalf of a person in 2025 [17]).
   - Establishing procedures for delegating authority, regulating property rights over AI-generated outputs (an example of such regulation is the rights of a special kind – sui generis, provided for by Article 33 of the Law of Ukraine "On

Copyright and Related Rights" [16]), and assigning liability for AI-related activities. acceptance of responsibility for the consequences of the AI agent's activities by subjects directly supported by a humans at different stages of the life cycle of AI systems.

3. **In insurance and medical law:**

- Developing methodologies for risk assessment related to specific AI systems and creating new insurance forms for activities involving AI systems.

4. **In social security and environmental law:**

- Determining how the costs (e.g., AI's substantial carbon footprint [18]) and benefits of AI systems should be distributed across society.
- Identifying the most effective methods to balance/ to eliminate imbalance the appropriation of benefits and the delegation of responsibility related with use of AI systems.

5. **In advertising and electoral law:**

- Rethinking the concepts of **mindfulness** (consciousness) and subconsciousness, as the Ukrainian Law on Advertising prohibits using technologies that influence the subconscious [19]. This aligns with Article 5 of the EU AI Act [5], which bans "*subliminal techniques beyond a person's consciousness or purposefully manipulative or deceptive techniques, with the objective, or the effect of materially distorting the behaviour of a person or a group of persons by appreciably impairing their ability to make an informed decision, thereby causing them to take a decision that they would not have otherwise taken in a manner that causes or is reasonably likely to cause that person, another person or group of persons significant harm*". As it is mentioned in part 29 of the Preamble, "*such AI systems deploy subliminal components such as audio, image, video stimuli that persons cannot perceive, as those stimuli are beyond human perception, or other manipulative or deceptive techniques that subvert or impair person's autonomy, decision-making or free choice in ways that people are not consciously aware of those techniques or, where they are aware of them, can still be deceived or are not able to control or resist them*." While any advertising, as well as electoral campaigns primarily target emotions, which are less consciously regulated than rational judgments, AI amplifies emotional influence through both through the generation of emotionally impactful content and through the choice of the moment and context of showing the appropriate content. For example, volunteer fundraising campaigns often perform better immediately after emotional events, such as military attacks and related consequences.

We intentionally avoided analyzing legal issues related to using AI in labour law, education and science legislation, agricultural law, and military law. Nevertheless, even this brief overview highlights the importance of fostering a culture of responsible AI use – a basic AI literacy in an era when AI has become the "new electricity," embedded in nearly every human activity.

Given the rapid inflationary nature of external motivation, which relies on tools of hard law, such measures alone cannot effectively regulate most AI-related issues. Conversely, soft law instruments, which target internal motivation by fostering a culture of responsible and informed AI use – especially through co-

regulation practices where stakeholders collaboratively create norms – offer greater potential and stability. These instruments are particularly critical as humanity constructs new layers of reality, such as the Metaverse and quantum technologies, while aiming for sustainable development within the already existing reality.

Conclusions

The transformation AI brings to the dynamics between internal and external motivation underscores the need for a balanced approach to legal regulation. Soft law emphasizes values and meanings to nurture internal motivation, whereas hard law serves as a necessary framework for external enforcement. Together, they enable a legal and ethical ecosystem that supports responsible AI use and addresses the multifaceted challenges posed by AI's integration into society.

The outlined legal issues – ranging from intellectual property to environmental and social implications – reflect the urgent need for adaptive legal frameworks. These frameworks should accommodate AI's evolving role in human decision-making, societal functioning, and ethical dilemmas. Collaborative regulatory efforts at both international and national levels will be essential for aligning legal norms with humanity's shared values and aspirations.

Thus, fostering responsible AI use requires developing soft law instruments and embedding them in a culture of co-regulation. Participants in such co-regulation become co-creators of norms, increasing their commitment to compliance and enhancing the durability of these norms in constructing new realities (e.g., the Metaverse or quantum domains) and achieving sustainable development within the existing reality.

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