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Digital Diplomacy

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ABSTRACT: This article discusses the role of digitalization for diplomacy. In a currently-unfolding new type of evolution of lawmaking through digital media, digitalization has become a central component of the online creation of law. Classical traditional means of diplomacy have changed in light of social online media and digital content. This article introduces the role of online communication as a new diplomacy gateway that cuts traditional red tape. Digital diplomacy being more transparent than previous forms of traditional diplomacy, has made international affairs more visible to multiple stakeholders instantaneously. In this feature, digital diplomacy appears to be more openly accessible to everyone to witness and more likely to be influenced by multiple streams, also on a truly global stage. At the same time, digital diplomacy brings along crowd influences and manipulation threats. Given the diminishing role of traditional media and nation-states' shrinking control over online information exchange as well as censorship, digital diplomacy can become a contested terrain of multiple rather uncontrollable forces at play concurrently. Clear downsides are the strategic manipulation of democratic processes possible in digitalized media. Internet vulnerabilities as well as digital inequality in terms of access to online information and technology skills are additional areas of improvement for digital diplomacy. The paper closes with a future prospect of the law and economics of digital diplomacy and a call for the need to address human rights online.

KEYWORDS: Censorship, Comparative Law & Economics, Democracy, Digitalization, Digital diplomacy, Diplomacy, Economics, Global governance, Human rights, International affairs, Internet, Leadership, Political E-marketing, Public Administration, Public Policy, Social Online Media

Introduction

Digitalization accounts for the most widespread and broad-based trend of our lifetimes (Puaschunder 2022a). The introduction of the internet revolutionized the way individuals communicate around the globe on a constant basis. Online information display and exchange have led to the most drastic reduction of communication costs. Unprecedented is also the increased transparency and speed of mass communication visible around the globe. With the internationalization of communication online emerged the strategic use of digitalization for democratic processes and state agendas, such as in international affairs and global relations management in diplomacy.

With the internet emerging, the world has become flat for transparent, easily-accessible and fast information flows. In particular, social online media have become prominent ways to steer crowds and coordinate action. While there has been a thorough investigation of the role of social online media for democratic processes – especially after January 6, 2021, in the USA in the aftermath of the U.S. Capitol Building attack – less is known, to this day, about the influence of digitalization on diplomacy.

Diplomacy engages countries in interaction, information exchange, and coordination of cooperation. Traditional means of diplomacy comprise spoken and written communication by elected and appointed representatives of states – foremost leaders and diplomats – who intend to build international ties for increasing a country's influence on events on the global scene. Diplomacy accounts for the main influence instrument in foreign policy and foreign public affairs. The results of diplomacy are international relations, cooperation and cross-border legal documents to guide on international customs – such as, for instance, international treaties,

agreements, and alliances. The means to accomplish successful diplomacy are long-term relation building and maintenance, negotiations and diplomatic missions.

This article captures the emerging trend of digitalization playing a role for diplomacy around the world. Online lawmaking and the creation of diplomacy have become subject to scientific discourse recently, foremost in the International Law Commission questioning the role of social online media for customary law in international law cases and practice. Digital *opinion iuris* formation has nowadays newly been attributed and influenced by voicing legal opinions online on social media. Traditional *opinion iuris* actors are believed to slowly change from juries, tribunals and country practices to online display of lawmaking in crowd communication. Law has also been speculated to be influenced by online sources, most recently even by Wikipedia articles, as Thompson, Luo, McKenzie, Richardson & Flanagan (2023) have argued. With ChatGPT and Bard as well as other AI-driven information gathering and crowdsourcing platforms online emerging, the time for integrating AI in lawmaking appears to have come (Chen, Stremitzer & Tobia 2022).

Today's instant and constant social media information gathering may drive bottom-up ideas about 'what is right' that then influence the content of lawmaking and the practice of diplomacy. There is currently also an attempt to capture a new generation of human rights online with particular attention to digitalization's impact on the shaping of human rights foci and the implementation of social customary norms (Puaschunder forthcoming). Increased social coordination online affects international communication without red tape and therefore lets international affairs appear to be more open to general debate and citizens' oversight.

At the same time, digital diplomacy create a difficult balancing act between free speech and the protection from harmful hate speech. Historically censorship and media control were housed in governmental prerogatives. Yet today's digital media and social online media platforms have changed the nature of transparency and global instant information exchange visible to large groups of people online.

Digitalization now also offers a quick and transparent way to express concerns that may influence and shape traditional diplomacy gateways and *modi operandi*. Crowd control and the access of the layperson to social online media may also influence the way diplomacy is practiced in the digital age. Digital diplomacy is also different in bringing along crowd influences and a diminishing role of traditional media outlets. Nation states have widely lost control over online information exchange. There is a diminishing traditional censorship of media in the Western world free-market democracies noticeable given the relatively equal access to free online media sources, such as Twitter, Mastodon, LinkedIn and Facebook as additional information sources.

With digital diplomacy also comes along the threat of strategic manipulation of democratic processes, internet vulnerabilities as well as digital inequality in terms of access to online information and technology skills. The paper closes with a future prospect of the law and economics of digital diplomacy and a call for the need to address human rights online.

Digital diplomacy

Digitalization accounts for the most widespread and broad-based trend of our lifetimes. The introduction of the internet revolutionized the way individuals communicate around the globe on a constant basis. Online communication has led to the most drastic reduction of communication costs. Increased transparency online and the quickening speed of mass communication have leveraged digital diplomacy to unprecedented levels of democratic oversight but also imbued social volatility in our democracies.

With the internationalization of communication online emerged the strategic use of digitalization for democratic processes and state agendas, such as international affairs and foreign relations. The world has become flat for transparent, easily-accessible and fast

information flows. Social online media use has risen steadily in politics and policy circles. The political use of Twitter, Mastodon, Facebook and LinkedIn has seen a steady rise in the last decade. Monitoring of citizens via digital media footprints has been used to backtest tax returns accuracy, marriage-based visa sponsorship and border entry decision-making.

In the political communication, transparency and access to interaction have been leveraged with Twitter and social online platforms being used for citizen engagement. Transparent communication has risen to not only the group members engaged in coordination, but also imbued means for outsiders to interfere with diplomatic agendas.

When it comes to diplomacy, digitalization has opened ways to comment on country principles in front of others in digital media. While traditional diplomacy was primarily practiced between licensed actors behind closed doors and media channels controllable, the internet nowadays allows interaction in front of crowds. This feature of digital democracy enables accountability but also opens ways to engage large-scale crowds online and speeds up the potential to break trends on a global level. The crowd dynamics elicited right in front of the eyes of others can also have direct implications for regimes and governance, when considering the occurrences in the wake of the Arab Spring, January 6, 2021, etc.

Digital diplomacy offers for one access to influence democratic processes, governmental leadership and international affairs. At the same time is digital democracy more fickle, uncontrollable and unpredictable given the increasing communication transfer speed online and the rising global transparency in the digital millennium. In the end, digital diplomacy practice in the use of online media for lawmaking is nowadays subject to the trade-off predicament between equal access to information online versus social volatility and manipulation threats.

Digital diplomacy challenges

Social volatility online may stem from social online media creating behavioral echo chambers that reinforce online landslides of opinion. Echo chambers online may also reinforce negative behavior, such as calling out and canceling people online. As market research has found that individuals remain longer on social online media platforms if the content is aggravating, social online media platform providers are incentivized to push aggravating content that steers up crowds. If online content is aggravating, digital diplomacy online may be more societally disruptive than traditional diplomacy.

With the coordination costs of boycotts and threshold for online criticism being lower than in conventional communication as well as online anonymity being possible in social online media forums, coordinated groups might attack information exchange strategically and/or unpredictably.

When more advanced digital tools, such as ChatGPT or Bard, are used for information gathering, the likelihood for misleading answers is likely. To these days, highly experimental AI-generated information tools are prone to 'hallucinate.' On the international stage, the information generated by AI for international affairs purposes may vary between countries. Imprecision in AI-generated answers in diplomacy may cause uncertainty, which may lead to disastrous outcomes when it comes to culturally-sensitive tasks, such as diplomacy.

All these features add social volatility to online digital diplomacy. As social online media platform providers become crucial online communication influencing gatekeepers, the question arises about the newly-leveraged crucial influence of the industry in digital diplomacy.

Digital diplomacy evolution

The environments, in which digital diplomacy is practiced, are potentially more transparent, international and hostile than controllable traditional diplomacy channels. A new digital diplomacy evolution may develop faster and more democratic than previous diplomacy

conduct. The online environment may be different as online elites and gatekeepers are rather industry professionals than traditional national diplomacy cadres. The skewed use of online sources by relatively young and tech-savvy people with internet access are an additional influence on digital diplomacy.

In all these features, questions arise if these digital diplomacy developments will lead to AI hub hegemonies on the international stage that control global governance due to social online media dominance? Will access to transparent digital diplomacy increase diversity or create silos of internet bubbles influencing law? Will the new online discourse differ from the traditional society preferences? Will the technology gaps around the world create new forms of digital inequalities that transpire in diplomacy gaps and digital diplomacy dominating technology hubs? Will the young influence on social online media rejuvenate lawmaking? Will the fast pace online speed up customary lawmaking? Will new ideas be recruited and evaluated differently as for being communicated online and in light of the emergence of cancel culture trends?

Regulatory recommendations

The digitalization disruption is a global trend that requires a multidisciplinary analysis. Rising employment of AI, big data insights companies and social online media demand for a common ground on the use of digitalization for law and diplomacy. The newly emerging trend of the online creation of customary law pushes society to find new methods of sensing legal trends online (e.g., from using AI chatbots to big data scraping, for instance in the form of Facepager, etc.).

Problematic appears in digital diplomacy that the digital environment is a multi-stakeholder phenomenon without borders and a partially legal and regulatory vacuum. To this day, no specific court regulates online conduct. International organizations' oversight of the internet is criticized for leaping behind industry developments in the digital arena.

Governments have mainly lost control over regulating media channels and traditional censorship. Social media online providers are oftentimes operating in cartels or even monopoly markets, which have not been broken up as governments may not want to lose intelligence, big data gains and network effects, which are bundled in these market-dominating service providers. Monopolies are also not acknowledged fully in social online media providers, since their services are oftentimes free. Classic monopolies are mostly only a concern if elevated consumer prices are involved, which is not the direct case in social online media providers that offer their services without monetary price (though a 'price' of time use and data gains occurs implicitly).

On the international level, questions arise if governments should control virtual spaces, especially in the case of corrupt authoritarian regimes, censorship and election fraud have occurred via the internet (Ackermann, 2020; Lentsch 2023). International governance bodies to regulate the internet remotely are demanded for, as internet crime appears to rise exponentially and search engine manipulation is possible (Puaschunder 2022b, 2023; Akamai State of the Internet Report 2022). Ethical questions have become outsourced to private sector entities, e.g., in the predicament over free speech versus hate speech censoring.

As for future research avenues, comparative behavioral law & economics approaches may help understand the most contemporary trends in digitalization around the world. The internet being a topic for the young that faces a short-term character and brief communication, will this influence our digital diplomacy understanding and conduct lastingly? Will law become more malleable and fickler? Future understanding of digital diplomacy may thus be housed in innovative educational centers, such as law schools or technology sector entities.

Future research should certainly debate the role of the internet in raising awareness, mobilizing e-social pressure and crowd control. Future policy work may also address the negative aspects of online cancel cultures and the loss of the classic governmental media control

in the age of digitalization. Academic institutions spearheading the topic of digital diplomacy ethics may pay attention to the future-oriented focus and data-driven analytic skills. International science to study contemporary digital diplomacy trends may benefit from researchers' independence and integrity mandate making them the perfect intermediary between business and politics.

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The Use of Capital Campaigns to Facilitate Successful Healthcare Philanthropy

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ABSTRACT: Due to financial constraints, urgent investments or even cutting-edge medical research projects with high financial requirements cannot be realized. The acquisition of major donations as an additional source of funding can contribute to this. Crucial here is the knowledge of the most potent donor target group - the high-net-worth individuals (HNWIs = financial assets of at least $1 million, UHNWIs = financial assets of at least $30 million) as major donors. However, there are hardly any comprehensive empirical data on wealthy individuals as donors to cutting-edge medical projects in Germany. This study, therefore, examines for the first time the functionality of major-donor fundraising explicitly for hospitals from two different perspectives - of hospital directors and high-net-worth individuals themselves. The study follows a mixed-methods approach, combining the three sub-studies. The study clarifies that UHNWIs and HNWIs in Germany are willing to become socially involved and that hospitals represent an attractive object of donation for them in terms of a large donation not only during their lifetime but also after their death. However, hospitals do not approach high-net-worth individuals consistently, effectively, and sustainably. This is because German hospitals are not appropriately structured and staffed to meet the wishes and needs of the target group adequately. For the future, a major rethink is coming to hospitals because major gift fundraising cannot be established as an additional funding source without first making a significant investment.

KEYWORDS: Fundraising, funding, cutting-edge medicine, High-Net-Worth donors, Ultra-High-Net-Worth-Individuals (UHNWI), High-Net-Worth-Individuals (HNWIs)

Introduction

The economic situation of hospitals and clinics in Germany is increasingly deteriorating. Problems are coming to a head - more than half of the clinics will continue to be in the red in the future. As a result, urgently needed investments or even projects in cutting-edge medicine cannot be realized due to financial bottlenecks (Berger 2020). Acquiring donations as an additional funding source to reduce the ever-widening financial gap of hospitals in the healthcare sector can contribute to this. Furthermore, it can be essential to implement specific funding projects in cutting-edge medicine and research with high financial requirements. Income from donations is already an additional funding source for many hospitals, as both the donor potential and the volume of donations are high in Germany. In recent years, the volume of donations in Germany has been between 5 and 10 billion euros (Deutscher Spendenrat e.V. & GfK 2021; Gricevic, Schulz-sandhof, and Schupp 2020a; 2020b). However, compared to the American fundraising market, the donation volume has not yet been fully exploited (Probst 2019). Crucial here is the knowledge of the most potential donor target group - the high-net-worth individuals (UHWNIs & UHWNIs as major donors. However, there has been no comprehensive research on either the donor potential or the donor behavior of this specific target group in the medical field. This is precisely where the study comes in to fill the existing research gap.

The objective of the study

The study explicitly examines the functionality of major-donor fundraising for German hospitals with high-net-worth individuals as major donors. The focus is on the analysis of the donation potential of (U)HNIWs on the one hand, for the realization of specific medical funding projects in

cutting-edge medicine and research, with a very high financial requirement, and on the other hand, the donation potential of this target group for closing existing funding gaps. In addition, it is questioned and scientifically evaluated whether and how German hospitals/clinics have so far dealt with the topic of fundraising among high-net-worth individuals at all. Accordingly, the following research question arises for the study:

What is the donation potential of high-net-worth individuals as the most potential donor target group, on the one hand, to realize medical funding projects of cutting-edge medicine and research in German hospitals and clinics, and on the other hand, to reduce the annual funding gap of the bilingual financing system?

This results in the following research objectives of the paper:

- Review the status quo of German hospitals and clinics concerning major gift fundraising
- Examine the potential willingness of German UHNWIs and HNWIs to provide financial support to German hospitals and clinics, mainly to provide financial support to specific medical grant projects with high financial needs.
- Derive normative recommendations for action for German hospitals and clinics that want to use wealthy individuals as donors to implement specific funding projects with high financial requirements or to reduce the annual funding gap

Research Design

In this study, the different data are systematically integrated and linked to meet the complexity of the research question. Accordingly, the author uses the mixed-methods approach, as the methodological approach is considered appropriate to answer the research question. The first and second sub-studies follow the classic pre-study model. Accordingly, a preliminary qualitative study was conducted with hospital directors as experts, and building on this, a quantitative study was applied to test hypotheses. In the third sub-study, only a qualitative study was conducted. This is because a qualitative study can generate the most important and relevant findings about high-net-worth individuals as a donor target group. In addition, access to this target group is a challenge that makes quantitative hypothesis testing of the qualitative findings obtained impossible due to an insufficient sample. All results of the three sub-studies will be interpreted and analyzed together at the end to derive recommendations for action. The following figure graphically represents the methodological structure of the study.

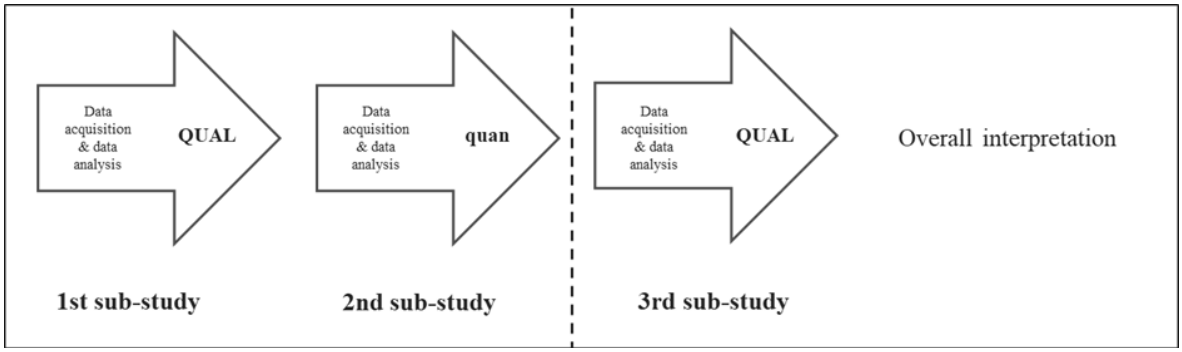

Figure 1: Methodological structure of the overall study (Own representation)

Research Methods

The research object of the first sub-study is to examine the status quo of German hospitals and clinics concerning major gift fundraising with high-net-worth individuals and to analyze its potential. Qualitative expert interviews were chosen for the data collection. For this purpose, a quota plan was drawn up with the criteria of the federal state and the position or profession of the

probands. Quota sampling as a purposive sampling strategy was used, since a targeted and deliberate search for defined characteristics is considered most suitable for generating hypotheses and, thus, for answering the research question. A total of 16 semi-structured guided interviews were conducted as expert interviews. The guideline was scientifically developed using the S-P-S method, according to Helfferich (2019). Qualitative content analysis, according to Mayring (2019), was used as the evaluation method.

The quantitative study (2nd sub-study), which builds on the first sub-study, has as its research object the verification of the findings from the preliminary qualitative study on the status quo. Various pretests were conducted for the standardized online questionnaire study for quality assurance purposes. In total, the 10-page questionnaire comprises 40 questions with different questionnaire types. A total of 287 participants took part. The researchers used the descriptive evaluation method because the focus was on mapping the status quo and not on forecasts or predictions of a possible relationship between variables.

Qualitative expert interviews were also conducted to examine the potential willingness of German UHNWIs and HNWIs to provide financial support to German hospitals and clinics (3rd sub-study). In this sub-study, the creation of the interview guide was also realized with the S-P-S-S method, and the structuring content analysis, according to Mayring, was applied as an evaluation method. A total of 10 qualitative expert interviews were conducted with 5 UHNWIs and 5 HNWIs, with access to this target group posing the most significant challenge, which in turn is reflected in the sample size.

Results

Through the expert interviews with hospitals throughout Germany, it became apparent that hospitals have general knowledge of fundraising. However, most hospitals have limited experience and knowledge in major gift fundraising with high-net-worth individuals. Only a few hospitals are already actively addressing the issue and can thus report initial practical experience with the donor target group. However, implementing active major-donor fundraising with the target group of high-net-worth individuals represents an explicit exception in the hospital landscape. This, in turn, highlights the untapped potential still to be found in hospitals, as only about 10% of the hospitals surveyed in the questionnaire study (2nd sub-study) indicated that they were actively doing so. Interestingly, the small proportion of hospitals with active major-donor fund-raising have, for the most part, only been carrying this out for one to two years, and it is, therefore, still in its infancy.

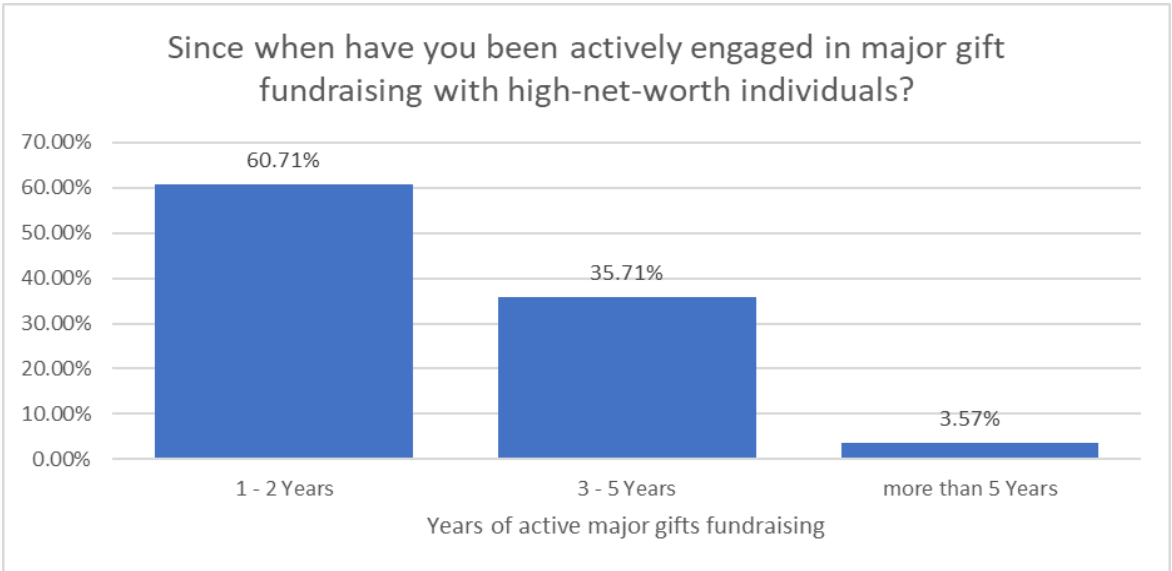

Figure 2: Results of the second sub-study - Active major gifts fundraising classified by year (n=28) (Own representation)

The most frequently cited reason hospitals have not yet addressed the issue of major gift fundraising or the donor target group of high-net-worth individuals is the financially tricky situation in which hospitals have found themselves for years. The Corona situation has exacerbated this, as the study's literature analysis results show. The financial situation is bringing hospitals to their knees and leaving no room for maneuvering to focus on the issue.

Figure 3: Results of the second sub-study - Reasons against major gift fundraising (Own representation)

Not only did the interviews make it clear, but the quantitative survey also confirmed the result that fundraising in general in German hospitals is predominantly "incidental" and is thus hardly institutionally anchored in the organization. There are only isolated examples of professionally run fundraising in German hospitals. The majority of hospitals are not adequately staffed or structured to focus on high-net-worth individuals as significant donors. The following prerequisites are not present in German hospitals, which repeatedly present the hospitals with challenges in terms of professionalizing fundraising:

- Low status of fundraising within the organization
- There is hardly any separate fundraising department of its own
- Trained major gift fundraisers are a rarity
- There is hardly any strategically oriented fundraising planning
- A convincing and motivating fundraising target image is often missing
- Parts of the communication are hardly targeted at UHNWIs and HNWIs
- Lack of support from the management level or the board of directors
- Hardly any potential sponsors in the donor portfolio
- Conducting an analysis of the potential of high-net-worth individuals is hardly ever done
- Realistic funding projects are often available, but there are difficulties in presenting a plausible investment need to funders
- Cooperation with consultants and agencies is seen as difficult

Overall, this shows that hospitals in Germany have a low level of institutional readiness. This may be a key reason hospitals have not yet addressed the donor target group of high-net-worth individuals. As the results of the qualitative and quantitative study show, the structural and personnel prerequisites are hardly present in most hospitals, which represents a central challenge

concerning major-donor fundraising. The majority of hospitals also have little to no UHNWIs or HWNIs due to a lack of institutional readiness, as they are unable to adequately serve this target group at all due to a lack of foundation in fundraising or awareness of the target group.
Even though the potential that the hospitals see concerning high-net-worth individuals as major donors is high, the vast majority of hospitals currently have neither concrete plans for focusing on the donor target group nor for establishing professional major-donor fundraising in the future, as the following graphs illustrate.

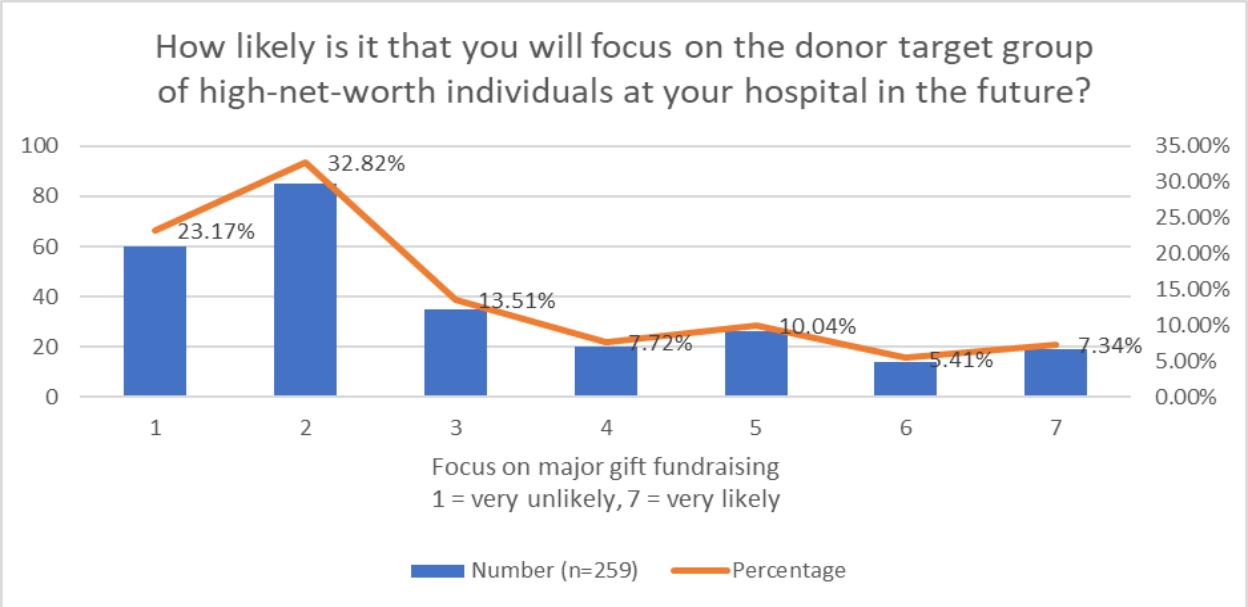

Figure 4: Results of the second sub-study - Focus on major gift fundraising (Own representation)

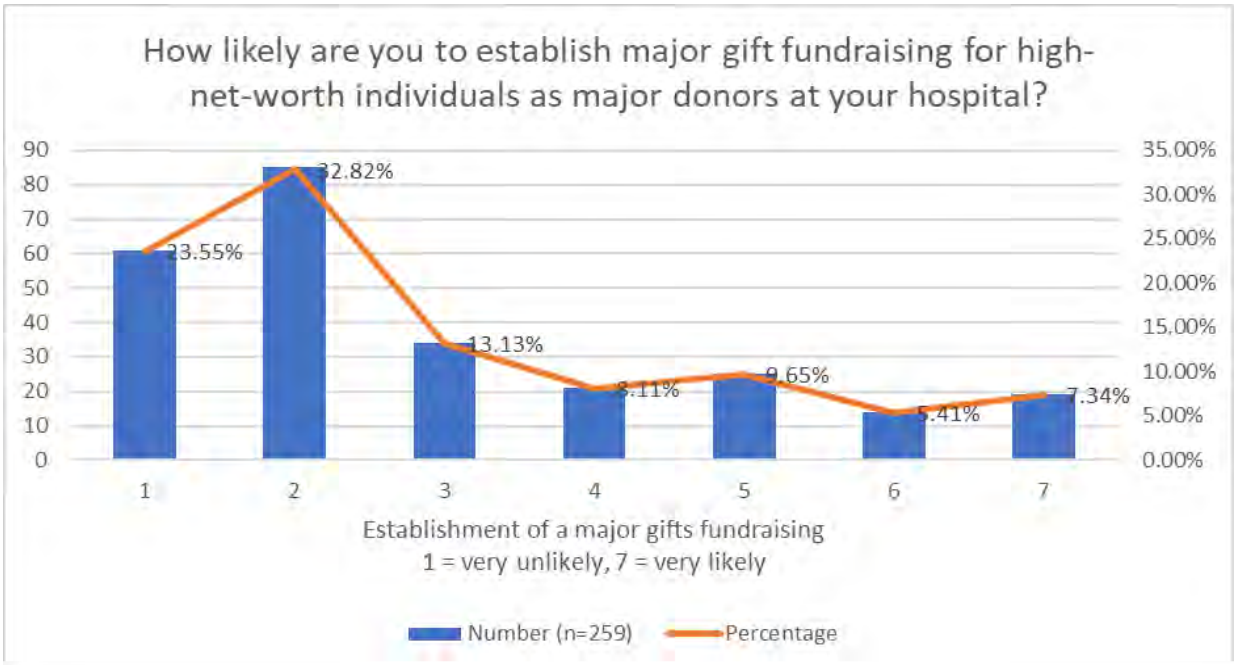

Figure 5: Results of the second sub-study - Establishment of a major gifts fundraising (Own representation)

They are also somewhat reluctant to engage in major-donor fundraising with high-net-worth individuals in the future. This may be because hospitals face financial bottlenecks, and the institutional willingness to deal with the issue is too low. Nevertheless, a few hospitals would be willing to invest in major-donor fundraising. According to the survey, about half of the

hospitals are willing to invest a specific budget in major-donor fundraising. However, the budget to be invested amounts to an average of around 54,000€ per year, which was only explicitly answered by 93 hospitals surveyed (Fig. 6).

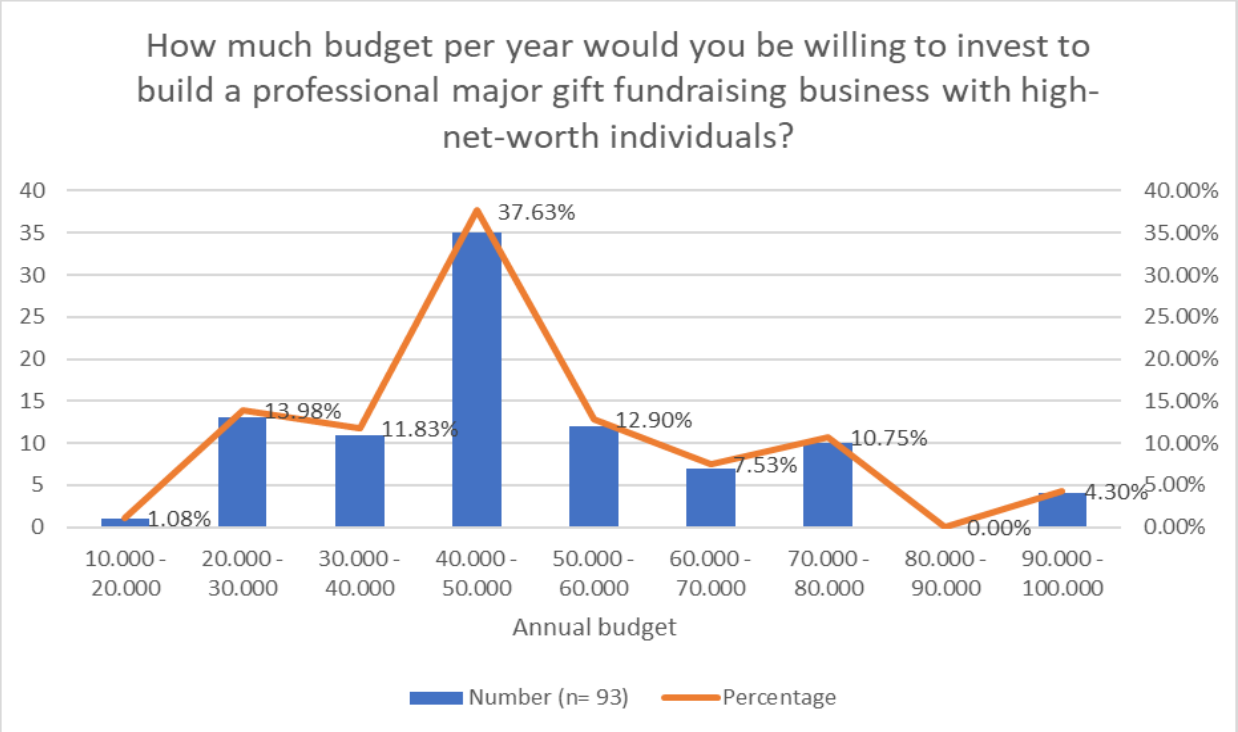

Figure 6: Results of the second sub-study - Annual budget for major gifts fundraising investment (Own representation)

From a business point of view, this budget is not even close to sufficient for setting up a major-donor fundraising operation, considering that, in addition to the structural requirements, human and technical resources are also necessary.

As the results clearly show, a change in thinking must occur, especially among hospitals, because this is the only way to create the conditions for major-donor fundraising. High investment costs deter many hospitals, but the understanding must be created that the high donation income significantly increases the return on investment with major-donor fundraising. Because on the other hand, high-net-worth individuals are particularly interested in contributing to the well-being of society and could well imagine fulfilling their social obligation and supporting hospitals with a significant donation. Health is also relevant for the wealthy, who would like to commit. However, the problem is that the wealthy are not approached consistently, effectively, and sustainably. Accordingly, many high-net-worth individuals have had little experience with hospitals regarding donations due to the lack of a correct approach, but there is a great deal of interest. In this context, as the results show, wealthy people often do not feel addressed on the one hand. On the other hand, the expectations of these people towards the organization, projects, and fundraisers are not met according to their wishes and needs. Anonymity is a relevant aspect that hospitals should take into account. Wealthy people want to act in the background as much as possible. The issue of influence is somewhat secondary. Only a say in projects and a general update on the supporting projects should be granted by hospitals to strengthen the donor relationship positively. The concern of the hospitals on this point is, therefore, unfounded.

In summary, there is a high level of willingness on the part of high-net-worth individuals to act as potential major donors for future projects in German hospitals. On the other hand, however, hospitals are not yet in a position to adequately serve this potential. Hospitals should

be aware that this is the largest growth area in the German donations market and that working with high-net-worth individuals is an excellent financial resource for securing cutting-edge medical projects in the future.

Implication for research and practice

Implications for practice could be derived from the core results of the study. The most important finding is that the *framework conditions must be right*. Major donation fundraising is lucrative, but it is not a task that can be done on the side. Awareness must change in hospitals, starting with leadership across all employees, and fundraising must be recognized as a relevant task within organizational structures. The following prerequisites should therefore be created:

- Major donation fundraising is anchored as a central management task and actively supported by management.
- It is integrated into the overall strategy.
- Adequate staffing with trained major donation fundraisers is available.
- Financial resources are adequately provided by the management.
- Major donation fundraising projects are well presented, and investment needs are clearly defined as a goal and regularly monitored.
- Proactive internal and external communication takes place.

Finding suitable partners is another recommended action. Approaching potential significant donors must be carefully prepared. An analysis of potential in the immediate and broader environment of the hospital is indispensable.

In addition, *realistic goals should be set*. After all, in order to pursue and achieve fundraising goals, hospitals must develop and implement a suitable strategy. Your major donation fundraising goals should be done in coordination with other organizational units and consistent with the organization's purpose.

Furthermore, hospitals should *not shy away from acquiring legacies*, as the results of the study show that high-net-worth individuals are willing to make part of their inheritance available to hospitals.

In addition, it is advisable *not to stir up unfounded fears*. Sub-studies 1 and 2 have shown that many responsible employees are afraid that (U)HNWIS will use large donations to obtain management positions or a say in the respective clinics. However, this fear is unfounded.

It is also important that *hospitals managers should be aware of the value of major gift fundraising through (U)HNWIS.* New hospital managers, board members, etc. should be aware that major donation fundraising through (U)HNWIS is a funding source of the future, as it is already today in the USA. This requires hospital managers with entrepreneurial know-how and an essential attitude. Hospital executives of the future should be aware that major gift fundraising is part of the business management toolkit of the future.

(U)HNWIS not to be perceived as "exotic" but as legitimate hospital supporters is another recommendation for action to the hospitals. The results of the present work have shown that (U)HNWIS do not act aloof and far from reality, but that most of them would care to donate to a hospital.

Use of fundraising consulting services can serve as further assistance. Hospitals should, in many cases, use fundraising consulting for top executives. Even though this is difficult in times of low budgets, it must be clear that the ROI here is high. Hospital managers must be aware that institutionalized major gift fundraising through (U)HNWIS will be a business milestone in the future of hospitals.

Equip staff involved in major gift fundraising with decision-making authority is another step in the right direction. The third sub-study showed that high-net-worth individuals are used

to discussing and debating with decision-makers. Hospitals in Germany should also meet this basic requirement.

Discussion

A closer look at the scientific penetration achieved in the literature to date on the topic complex of "donation potential of high-net-worth individuals as major donors for the hospital sector" revealed the necessity and relevance of the present work. That is because a comprehensive joint empirical investigation of the two constructs of hospitals and high-net-worth individuals as major donors and practical recommendations for action for the hospital sector derived from this has yet to take place within the framework of previous research achievements. It was found that only general fundraising or major donation fundraising was the subject of the analyses. Still, a joint study of the German hospital landscape and the donor target group of high-net-worth individuals as significant donors was lacking. Against this background, the motivation to close the research gap arose. Moreover, the central purpose of the present work was to expand the scientific knowledge of the targeted research area.

The thesis fulfills its underlying objective by first presenting the status quo in German hospitals on the topic of major-donor fundraising with high-net-worth individuals based on an appropriate theoretical foundation with the help of a comprehensive literature review, as well as by using a mixed-methods approach in a preliminary qualitative study (16 interviews) and a building quantitative empirical study with a sample of 287 subjects. In addition, the objective can be considered fulfilled since the views of UHNWIs, and HNWIs in Germany on the donation potential for German hospitals were also recorded with the help of a further qualitative study (10 subjects). This helped to identify well-founded implications for the hospital sector in dealing with high-net-worth significant donors based on the three sub-studies.

The empirical study revealed a clear picture of the German hospital landscape regarding major donation fundraising with high-net-worth individuals. The lack of institutional readiness not only structurally but also technically and in terms of personnel puts hospitals in Germany in a difficult situation that makes focusing on major donation fundraising much more difficult. Above all, the financial aspect must not be disregarded because financial bottlenecks make it almost impossible to establish major-donor fundraising. These effects directly influence the success of major-donor fundraising with the target group of high-net-worth individuals because, without these aspects, major donation fundraising in German hospitals is not possible.

Hospitals see great potential in this area, and high-net-worth individuals are convinced that they can give something back to society and contribute to social welfare by making large donations. The purpose of the donation is relevant from the point of view of hospitals and for UHNWIs and HNWIs as significant donors. Support for funding projects in cutting-edge medicine, which involve an enormous amount of financing, is seen as positive. However, high-net-worth individuals do not want to use their money to reduce debt.

Overall, the objective of this work is concretized in the successful completion of the two research objectives, which were to map the status quo in German hospitals on the topic of major-donor fundraising with high-net-worth individuals for the first time (1st research objective). Additionally to include the perspective of high-net-worth individuals as potential major donors for the hospital sector (2nd research objective) as well as to derive recommendations for action, based on the findings, for the hospital sector in dealing with UHNWIs and HNWIs (3rd research objective). The work thus fulfills the demand of the practice, a first-time presentation of the situation of hospitals in Germany on the topic of major-donor fundraising, particularly with the specific donor target group of high-net-worth individuals. Also, showing concrete measures for the hospital sector that contribute to successful major-donor fund-raising with high-net-worth individuals. The work thus provides

a comprehensive understanding of major gift fundraising with UHNWIs and HNWIS specifically for the hospital sector.

However, the work provides exciting results for researchers and managers in the healthcare sector and contributes to a better general understanding of major gift fundraising for other sectors that may also want to deal with the donor target group of high-net-worth individuals. All researchers and managers involved in major gift fundraising with this target group can gain valuable insights into how high-net-worth individuals view the topic of giving through this work.

Like any scientific work, the present study also has certain restrictions, which at the same time offer starting points for a need for further research. Without question, further and, above all, more in-depth research into major-donor fundraising for German hospitals appears necessary. An initial picture of the current situation in the hospital sector concerning major donation fundraising with high-net-worth individuals remains a first start and, thus, an auxiliary construct used to approach the subject matter in its complexity and to gain an overview of the field. The knowledge gained through the study can thus serve as a basis but cannot fully capture the complex structures.

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DNA Collection: A Comparative Analysis of Legal Profiles

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ABSTRACT: This paper aims to differentiate between the legal norms related to genetic data exchange and the technical-scientific norms applied during biological sample collection and analysis. While legal norms are resistant to legislative harmonization, technical-scientific norms are conducive to universalization. The study will survey the sources within the European Union, which are diverse and occasionally disorganized. These sources address the sharing of genetic data during police and judicial cooperation among member states, serving different objectives. The DNA Database allows judicial authorities and police to search and exchange DNA profiles with international databases in accordance with the Prüm Treaty and "Prüm Decisions" (European Union Council Framework Decisions 2008/615/JHA and 2008/616/JHA) to combat terrorism and cross-border crime through international police cooperation.

KEYWORDS: DNA collection, DNA databases, PrümTreaty, privacy

Introduction

In many legal systems, not only in Europe, one can find norms concerning the examinations to be carried out on a person's body for evidentiary purposes. From the experiences of some of these, it is possible to note how different legal systems have addressed the problem of the coercivity of retrievals, establishing, for example, the susceptibility of the suspect to the obligation to undergo a bodily retrieval depending on the type of crime being prosecuted or the type of retrieval to be performed (Symeonidou-Kastanidou 2011). The difference in approach between common-law and civil-law countries is also important, where the former require the consent of the subject for DNA collection, the latter, in the vast majority (Italy is an exception, it permits the enforcement of the collection), allow the levy to be compulsorily enforced. Therefore, it seems appropriate to provide a quick overview in this regard.

Comparative legal profiles: France, Denmark, Sweden, and Norway, Italy, US and UK

The issue of DNA collection in France has been a contentious topic for years, with calls to expand current policies and procedures strengthening since the late 1990s. The French government is currently deliberating legislation that would allow for more extensive DNA evidence collection from individuals linked to criminal activities.

The French administration is currently examining a potential legislation that would permit the utilization of DNA examination for individuals implicated or suspected of committing major transgressions. Furthermore, they are exploring the feasibility of assembling genetic proof from convicted lawbreakers with documented records of specific violations (Vailly and Bouagga 2019) This process entails the gathering of blood or saliva samples from persons that will eventually be integrated into a comprehensive database utilized by law enforcement agencies for scrutinizing criminal activities.

The suggested legislation has encountered resistance from civil liberties organizations and privacy proponents. Their apprehension revolves around the possible inappropriate usage of genetic information by law enforcement agencies. The maintenance and distribution of this data also present a considerable risk to privacy and security. The implementation of this law may also result in prejudiced treatment or other forms of discrimination based on genetic data.

The expansion of DNA collection in France has significant benefits, but it raises concerns about the protection of civil liberties for all individuals. The ongoing debate about these proposed changes leaves uncertainty about their implications for France and its citizens. The compatibility of this proposed expansion with international human rights standards is in question (Róisín 2022, 6,15)

Collecting and storing genetic data from individuals suspected of a crime can be viewed as a violation of privacy, raising concerns about discrimination based on genetic information. However, proposed legislation in France includes specific safeguards; written consent is mandatory before DNA sampling, and strict limitations exist on how data can be shared with other countries. The secure storage of information is also required to protect individuals' privacy. At present, it remains unclear how this ongoing debate will ultimately be resolved in France, but these safeguards can mitigate concerns about privacy and discrimination.

The expansion of DNA collection in France demands deep scrutiny of its impact on civil liberties, human rights, and global standards. Although this measure can bolster public safety, achieving an all-encompassing solution must involve weighing the potential benefits against ethical, legal, social and even economic consequences. This approach can safeguard individual rights whilst enhancing security and ensuring that stakeholders are aware of their obligations and privileges.

Denmark, Sweden, and Norway have a rich history of utilizing DNA collection for tracing family lineage since the Viking era. Today, it benefits medical research on hereditary ailments and helps to identify criminal suspects and organ donors. This genomic data provides insightful knowledge into the transmission of diseases and movement of populations over time (Martin 2005)

Thus, DNA collection is an indispensable resource for medical research and criminal investigations in Denmark, Sweden, and Norway. As technology advances, the potential utility of DNA analysis may solve several mysteries concerning population movements and genetic diseases. In brief, DNA collection in these countries is an influential tool that holds invaluable promise for future applications.

The adoption of DNA collection in Italy has skyrocketed in recent years as a result of technological advancements and an increased emphasis on its use in criminal justice. The adherence to globally standardized protocols is crucial in maintaining the scientific and legal validity of crime scene investigations (Montagna 2012).

The Prüm Treaty, a cooperative agreement among seven European Union states aimed at combating terrorism, cross-border crime, and illegal migration by promoting the exchange of information, has been ratified by Italian law No. 85/2009. This law establishes guidelines for the Italian National Forensic DNA Database and modifies the Code of Penal Procedure to regulate the collection of DNA profiles and their impact on personal freedom. This law underwent changes in 2017 to enable data storage from those accused or suspected of a crime, as well as those released without charges. Individuals may also choose to give their DNA profile to the government voluntarily, bolstering law enforcement's access to critical data.

Despite concerns regarding civil rights and security breaches, DNA collection has become a widely accepted part of the Italian criminal justice system. The application of forensic DNA technology has proven incredibly fruitful in identifying unknown suspects linked to crime scenes, locating missing persons, and offering vital evidence for criminal investigations. It is likely that DNA collection will continue to expand in popularity as more nations begin to understand its value in criminal justice and adopt the technology in similar ways. Legislation in the United States mandates the collection of DNA from individuals found guilty of specific severe offences. The U.S. Supreme Court has ascertained that this practice is lawful and does not infringe upon the Fourth Amendment's prohibition of unreasonable searches and seizures if it corresponds to law enforcement and crime prevention objectives essential to the state (For details see “Maryland v. King US SUPREME COURT”)

The UK's Human Tissue Act of 2004 mandates the solicitation of informed consent from individuals before sample collection. Furthermore, compliance with the individual privacy protections outlined in the European Convention on Human Rights is required for nations seeking membership or recognition in the European Union.

DNA collection for criminal investigations has become increasingly commonplace in the US, with police officers gathering samples from those under arrest and the FBI maintaining a database of over 13 million profiles (Aziza 2019). In contrast, the UK generally limits sample collection to those arrested for serious crimes.

Although the United States and the United Kingdom employ varying methods and levels of involvement, both nations have achieved notable triumphs using DNA analysis in the realm of criminal inquiries. Impressively, in just one year - 2017 - the United States utilized DNA evidence to successfully solve over 15,000 criminal cases. Similarly, the UK has identified and prosecuted numerous suspects thanks to the application of forensic science to their investigations.

Governments around the world have implemented DNA collection laws aimed at enhancing public safety while also upholding individual rights. Though the specifics of implementation may differ across countries, the need to balance these competing interests is universally acknowledged and prioritized.

The United Kingdom has a history of DNA collection, having gathered samples from its population for over two decades through the National DNA Database (NDNAD) initiative since 1995 (For details, please consult the *National DNA Database Strategy Board Biennial Report 2018–2020*) This collection aimed to provide law enforcement with data to combat crime. Today, the NDNAD holds profiles of over 5.6 million individuals.

A comparative analysis of DNA collection practices across countries illustrates the efficacy of the UK's approach. A 2019 study conducted in Europe reveals that the UK stands out among the EU member states for its successful employment of DNA matching in crime prevention and detection. This study also demonstrates that the rate at which DNA matches lead to arrests in the UK is nearly twice as high, in per capita terms, as other countries included in the analysis. As DNA collection and storage practices contribute significantly to the UK's law enforcement success, there is strong rationale for continuing and improving these practices to ensure public safety. While there have been concerns raised by civil rights groups, the presented evidence underscores the ongoing importance of this effective tool in law enforcement.

The Prüm Treaty and Decision 2008/615/GAI

The Prüm Treaty and its incorporation into the EU legislative framework follow the guidelines set by the Hague Program and prioritize information exchange based on the principle of available information. This principle fosters cooperation between law enforcement agencies by enabling the sharing of data held by individual States.

The Prüm Treaty and the Decision 2008/615/GAI introduce three novel features. Firstly, each state party is obligated to establish and maintain centralized national archives that collect DNA profiles. Secondly, member states have the right to request genetic data collection even before exchanging information (Art. 7). Lastly, the use of automated procedures and online access by national contact points of the member states facilitates consultation and comparison. These advancements enhance cross-border cooperation and facilitate effective law enforcement efforts.

To fully comprehend transnational research and evidence formation, it is essential to refer to the conceptual framework. Specifically, collecting transnational genetic data requires an analysis articulated in two directions. One direction entails the transmission of available genetic data between states through a binary system consisting of accessing national databases

online and transferring genetic data to the state that requests it. The other direction involves the retrieval of unavailable genetic data through transnational means.

The Prum Treaty has paved the way towards establishing a region where information can move freely while still maintaining the standards for safeguarding collected data. The value of the Treaty extends beyond its ability to permit information to circulate within a single network of databases that domestic authorities of member countries can easily access. It indirectly promotes the harmonization of individual states' internal systems through commitments made by contracting countries at the global level.

The process of accessing genetic data through online databases involves both consultation and comparison. The sharing of information is facilitated by automated access to certain categories of information available online, contained in DNA databases. This first phase of consultation allows the requesting authority to access only an anonymous consultation index and a reference number to verify the presence of the genetic data in the database.

National contact points form a network through which exchanges take place, but it is unclear from the Treaty if requests made to these points must come solely from law enforcement or also from the judicial authority. Two interpretations are possible, a restrictive one and an extensive one, with the latter being preferable for preliminary investigations.

If the consultation or comparison produces a positive result, the requesting party receives communication of an anonymous DNA profile index corresponding to the transmitted one. This opens the second phase of the procedure, which results in the transmission of information tied to the index data to the requesting authority. The Treaty only requires an explicit request from the interested authority as a procedural requirement, referring to internal regulations and judicial assistance conventions regulating relations between EU countries for all other aspects. Failing such a request or an express reasoned refusal, the internal authority would be duty-bound to comply with the request.

Transnational DNA Sampling

Article 7 of the Treaty and Prüm Decision provides mutual assistance between states when it comes to collecting biological material from individuals. If an authority in one state requires a DNA profile from a person in another state for a criminal investigation, they can request it through a mandate issued by the competent authority in their own jurisdiction. The requested state must then collect the genetic material, analyze the DNA, and transmit the results to the requesting state, all in accordance with their own laws.

However, there are two critical issues with this type of data exchange. First, it raises questions about the obligation to contribute genetic data to a database. Once a DNA profile has been collected and transmitted, it could remain in the database of the requested state and potentially be used by other countries in the future. The decision of whether or not to store this data falls within the purview of each individual country's internal legislation regarding database management.

Secondly, due to the lack of harmonized regulations on biological specimen collection and genetic data processing, the methods used by the requested state may be insufficient in terms of protecting the fundamental rights of the individual and ensuring analytical data reliability. This lack of standardization could result in inconsistent quantities and qualities of data being circulated between countries, affecting criteria for subject selection, data entry into databases, identification of crimes for which genetic data collection is permitted, and data retention periods.

Although there is a need for regulatory harmonization, in its absence, the minimum condition for protecting fundamental rights is to adhere to the guarantees established by the European Convention on Human Rights and the Nice Charter, as interpreted by the European

Court of Justice. The principle of proportionality, a cornerstone of European law, becomes a balance between the goals of criminal investigation and the inviolable rights of the individual in this context.

The emergence of new forms of cooperation through DNA profiling has led to the need for adequate protection of personal data that is at risk from information sharing. The Prüm agreements and Decision 615 of 2008 address this issue by requiring that individual states ensure a level of protection at least equivalent to that of established conventions and recommendations. Additionally, these agreements establish specific rules and guarantees for those whose data is being processed. Overall, principles and rules governing the treatment of personal and genetic data emphasize legality, proportionality, limited processing purposes, accuracy and data updating responsibilities, safeguards for data subjects, and the establishment of national supervisory authorities.

Genetic investigations and the right to privacy. DNA databases

A not insignificant problem pertaining to DNA testing (but generally encompassing more broadly all genetic investigations, whether conducted for research or forensic purposes) concerns the protection of the person's privacy, since this test provides access to genetic information, i.e., knowledge of the individual's hereditary traits, not strictly necessary for identification, which is the purpose of the test (Song 2013, 10-89). There are conflicting perspectives and queries surrounding the appropriate utilization of genetic testing outcomes. Furthermore, determining which individuals are entitled to access this information, the duration of its retention for investigative purposes, and its potential destruction upon conclusion of the proceedings are all pertinent issues. Additionally, identifying the party responsible for managing this data while guaranteeing the confidentiality of the concerned individual demands consideration.

Genetic tests allow, as seen, to touch upon more confidential aspects of the individual and, also, of his family, for example, giving information about the reproductive capacity and health of the offspring, revealing a certain predisposition to certain diseases, etc. It must be avoided that on or as a result of a genetic test carried out for the purpose of ascertaining facts pertaining to the trial, information is collected or used that is not indispensable for the purpose of ascertaining the truth (Aziza 2019). The information obtained from genetic examinations conducted on an individual is different from any other information, in that the genetic makeup is defined and unalterable throughout a person's lifetime. The research on the human genome and the resulting applications open up vast prospects for progress in improving the health of individuals and of humankind as a whole but emphasizing that such research should fully respect human dignity, freedom and human rights, as well as the prohibition of all forms of discrimination based on genetic characteristics […] (*apud Universal Declaration on the Human Genome and Human Rights*, 1997).

In this perspective, the information (by way of genetic counseling) that the person concerned must receive before undergoing a genetic test plays an important and necessary role. Indeed, these, compared to other tests, are characterized by their predictive aptitude, meaning they provide information relevant to the prediction of diseases destined to occur in the future. For these reasons, data communication must be carried out in such a way as to ensure the confidentiality and privacy of the collected information.

There is a danger that this confidential and intimate information, if known by the person on whom the DNA test was performed, could lead to anxiety and depression and/or compromise the right not to know, not to know, for example, that he or she carries a disease, or is predisposed to it, hitherto ignored parental ties, etc., or at the limit lead to discrimination on the basis of genetic heritage. Even the *European Convention on Human Rights and Biomedicine* (1997) recognizes, in Article 10, the protection of an individual's private life concerning any personal health information is a fundamental right. This includes the

entitlement to access any data collected regarding one's health. Despite this entitlement, the preference of individuals who opt not to receive such information must be respected and upheld. And, in Article 11, discrimination based on one's genetic background is strictly prohibited. Regardless of an individual's genetic heritage, it is imperative that they are treated with fairness and respect. This mandate aims to promote equality and prevent discrimination based on inherent traits beyond one's control.

In fact, in the absence of certain rules, DNA analysis presents the danger of intrusions into the intimate and inviolable sphere of the individual's personality. This danger is being fueled more today by the establishment of DNA databases raising issues of ethics, privacy, and freedom of the individual. Scheduling the "genetic code" of every human being at birth would make it possible to have on file the genetic data of the entire population, and if necessary, the available data could be compared with the results obtained from traces found, for example, at the scene of crimes.

DNA databases, which, moreover, are already operating in many European states and the US, have the aim and purpose of creating an electronic archive similar to that which already exists for fingerprints (AFIS) to make it easier for investigators to search for criminals, starting with archiving the DNA profile of the prison population and those accused or suspected of particularly serious crimes. The benefits and help that the database can provide should not, however, make us forget the problems and cautions that inevitably follow. In the European context, as early as 1995, England was the first to have a DNA database, and in May 2002, it contained more than 1,500,000 DNA profiles; in 1998, Austria, Germany and the Netherlands also had their own DNA database; Finland and Norway established a national database in 1999 (Martin, Schmitter, and Schneider 2001); in 2001 Switzerland and Denmark also established a database (Schneider and Martin 2001) and in 2003 the databases of Hungary and Latvia were activated.

The significance of DNA databases in the United States is profound. It has fundamentally transformed criminal investigation methods and bestowed investigators with a potent tool to identify suspects and clear the wrongly accused (For additional information see CODIS DNA Databases). The National DNA Index System (NDIS) is an FBI-managed database that enables law enforcement agencies across the nation to compare, exchange, and access DNA analysis results. NDIS facilitates the collection of DNA evidence from crime scenes and laboratories, compares it with a nationwide repository of profiles, and cross-references crimes. The end product is the closure of previously unsolved cases. Besides, NDIS is instrumental in exonerating the unjustly convicted and providing comfort to victims through reassurance (For additional information see National DNA Index System). The use of DNA databases equips law enforcement with the capability to apprehend serial offenders and identify unidentified human remains, offering conclusive responses to families who have been enduring uncertainty for years. In short, DNA databases are essential instruments in identifying lawbreakers, absolving innocent individuals from false accusations, and providing comfort and closure to victims and their families, indispensably contributing to the pursuit of justice. Thus, the United States must prioritize investing in and enlarging the employment of DNA databases for the sake of public safety and preserving civil liberties. This essential measure marks an important step towards a safer and more egalitarian society.

A comprehensive national database provides numerous advantages, particularly its ability to compare records from various laboratories (Dedrickson 2018). With over two hundred laboratory agreements in place, the Federal Bureau of Investigation (FBI) can assess their records to compare them against NDIS profiles, which leads to broader coverage than if each laboratory had a separate database. This extensive coverage saves both time and ensures accuracy by identifying offenders and conducting investigations swiftly, resulting in higher conviction rates while exonerating innocent individuals faster. Furthermore, sharing records between labs bolsters accuracy and reduces errors. By ensuring that every laboratory follows

the same standards of analysis, investigators can trust that results will be consistent and reliable across all facilities.

To fully realize the potential of DNA databases, it is necessary that law enforcement agencies have access to the most advanced technology and equipment. This includes personnel training, maintaining up-to-date databases, and accessing multiple lab records. The government must continue to invest in groundbreaking technologies that support law enforcement agencies in obtaining the best possible results in the shortest possible time, thus leading to increased convictions and exonerations of the falsely accused.

To summarize, DNA databases hold immeasurable value in aiding law enforcement and the judicial system. It is crucial for the United States to not only uphold the maintenance of these databases but to also broaden their implementation. Such efforts will ensure prompt justice for crime victims, while simultaneously providing enhanced public safety and civil liberty protections for all citizens.

The use of DNA databases has increased significantly in both the UK and Europe in aiding criminal investigations. These databases house genetic material acquired from individuals, allowing for comparisons to be made against potential suspect DNA profiles. The National DNA Database (NDNAD) in the UK and the European Network of Forensic Science Institutes (ENFSI) are responsible for facilitating the implementation of the European level DNA database. These databases have been crucial in the resolution of numerous criminal cases, with law enforcement authorities being able to easily identify potential suspects by comparing their DNA profiles to pre-existing records. Moreover, DNA analysis has proven instrumental in the exoneration of individuals who were wrongly convicted.

The principle of proportionality is indispensable in maintaining the efficiency of DNA databases. It dictates that any access to an individual's private genetic information must be necessary and in proportion to law enforcement's objectives. This principle is enshrined in the UK's Police and Criminal Evidence Act (PACE) and has been recognized by the European Court of Human Rights as a critical consideration in the use of DNA databases. Retention and collection of genetic data must have a clear law enforcement purpose and not extend beyond what is necessary to achieve this aim.

DNA databases have proved crucial in solving criminal investigations and exonerating individuals wrongly convicted of crimes in the UK and Europe. Hence, it is crucial to adhere to the principle of proportionality to enable the effective use of these databases without infringing on an individual's right to privacy.

The successful utilization of DNA databases in the UK and Europe provides examples of adroit yet responsible use. It is imperative that other countries follow suit to realize the benefits of these databases worldwide.

Italy currently lacks a national DNA database due to Constitutional Court ruling No. 238 of 1996. This decision declared Article 224 paragraph 2 of the Criminal Procedure Code unconstitutional, as it allowed judges to order measures that affected the personal freedom of suspects outside of those already established by law. The court called upon the Legislature to carefully evaluate and determine specific cases and ways in which personal freedom could be legitimately restricted. Until the Legislature intervenes, it is impossible to execute expert operations that involve acquiring biological samples for DNA extraction. Consent from the person involved is required for any such measures.

In Italy, the ethical implications of DNA databases have raised several concerns, including the accuracy of such evidence and privacy issues. Therefore, the Italian laws mandate individuals to provide explicit consent to have their DNA information added to the database. Moreover, any information collected must be secure and used solely for criminal justice or medical research. Additionally, the application of DNA databases in detecting individuals is strictly regulated and limited to specific cases. Therefore, while these

repositories may support law enforcement and medical studies, preserving individuals' privacy and data accuracy is essential.

Fingerprinting stands as a widely used method for law enforcement to identify criminal suspects among other forms of biometrics. The Police and Criminal Evidence Act (PACE) of 1984 outlines the authorities given to officers to obtain fingerprints from the suspects. This may be necessary for investigation purposes or as a means of confirming the suspect's true identity. PACE also highlights the conditions under which fingerprints may be obtained from someone who has been arrested but not yet charged with any crime. In this case, the police must have adequate grounds to believe that obtaining fingerprints or biometric information would be beneficial in the investigations. These fingerprints must be obtained through procedures laid down by PACE, and in case of failure to comply, an officer may face disciplinary action.

Furthermore, to conform with the law, police officers may take DNA backups in addition to the fingerprints. They must, however, obtain consent from the suspect before the fingerprints and DNA backups are taken. If a suspect declines to provide their DNA or fingerprints, an officer may solicit a sample from a relation of the suspect who has already been identified. Regardless, the police officer ought to inform the suspects of their rights under PACE and the likelihood of being prosecuted if they decline to comply.

The Police and Criminal Evidence Act (PACE) establishes clear directives on the destruction of DNA and fingerprint records. Once an investigation is over, any backups of a suspect's biometric data must be eliminated, unless there is a court order permitting it to be kept. The Police and Criminal Evidence Act (PACE) provides comprehensive guidelines for handling biometric information collected by law enforcement agencies. These guidelines carefully delineate the procedures for collecting DNA and fingerprint samples from suspects and emphasize the importance of destroying any evidence that is no longer needed, particularly any evidence collected without consent. This balance between protecting individuals' privacy and enabling law enforcement to use biometric information in their investigations is a vital aspect of PACE's approach.

Conclusions

Supporting the usefulness and, at the same time, the special attention that jurisdictions will have to pay in establishing DNA databases is also a resolution of the Council of the European Union of June 9, 1997, which calls on member states to provide themselves with national DNA databases and to adopt criteria for standardizing DNA techniques in order to exchange DNA analysis results at the European level. This, in view of the important contribution the exchange can make to criminal investigations.

The same resolution points out that "Whereas DNA investigation may involve not only technical, legal and political but also ethical aspects which need to be given appropriate consideration in the further development of cooperation activities;" (For details see Council Resolution of 9 June 1997 on the exchange of DNA analysis results)

To explore the collection and exchange of genetic data in the European Union, it is essential to differentiate between two distinct levels. The regulation governing the collection stage is left to the individual member states, with the EU legislature limited to intervening when the legality and proportionality of collecting biological samples for DNA analysis are at stake. On the other hand, European lawmakers have impacted the exchange stage significantly, utilizing both police and judicial cooperation tools in criminal matters.

As indicated by measures applied to date in the EU, genetic data exchange can occur through two modes: centralized information collection systems- as seen with Europol and Eurojust- or simplified exchange through direct access to national databases in connection with each other. The latter method is stated in the 2006/960/GAI and 2008/615/GAI

framework decisions, which can be associated with mutual recognition measures for acquiring genetic data for probative use. While the first exchange approach generates independent information collection systems separate from their national databases, requiring central management, the second approach requires sharing.

Across the entire territory of the European Union, each member state's knowledge resources can be accessed through simplified procedures or direct querying of national databases, without the need to previously transfer data to a centralized system. However, there are concerns with both of these methods of information exchange. In the absence of harmonized regulations regarding the collection of biological samples and treatment of DNA profiles, and due to the continued relevance of national legislations, heterogeneous data circulates throughout the EU in terms of both quantity and quality. The data provided by each member state do not correspond to uniform selection criteria, neither for the individuals indexed nor for the offenses for which the data collection is permitted, and even the retention times vary significantly. Reciprocity, an implicit precondition for any form of exchange, presupposes data availability on crime categories and individuals identified according to common criteria, in order to avoid member states contributing to police and judicial cooperation in considerably different ways.

Therefore, it is desirable for the European legislator to aim for harmonization in this area, whose legitimacy is well-founded, especially in the new institutional framework introduced by the Lisbon Treaty. This Treaty foresees that "where necessary to facilitate […] police and judicial cooperation in criminal matters having a cross-border dimension, the European Parliament and the Council may establish minimum rules by means of directives, on the basis of the ordinary legislative procedure […]" (Art. 82, Par. 2).

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The Relationship between Literary Development and Traditional Medicine in the Southern Dynasty of China

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ABSTRACT: During the Southern Dynasty of China, the belief that human physiology and temperament derived from innate nature and external influences persisted, leading to a close relationship between personal constitution and literary style. This study investigates the connection between Chinese traditional medicine and literature in the Southern Dynasty. The weakened health of the aristocratic families in the Jiangdong region became a backdrop to showcase their political talents and moral integrity, establishing that a weak physical constitution symbolized high literary excellence, as evidenced by the famous, flamboyant literary style of the time. In this context, physical health was intimately linked to literary creation and style, forming a dynamic cycle through mutual resonance. This research provides a new interdisciplinary perspective for studying classical Chinese literature and is significant for East Asian cultural studies.

KEYWORDS: East Asian cultural studies, classical Chinese literature, the Southern Dynasty, personal constitution, literary style

Introduction

Xie Jiusheng (2018, 113) points out that in the case of China, the relationship between traditional art and traditional Chinese medicine (TCM) characterize by homogeneity, hybridity, and literary nature, which means that medicine has art in it, and art has its medicine. This phenomenon is particularly evident in the artistic biographies of the Wei-Chin and Northern and Southern Dynasties. In other words, during the Wei, Chin, and Northern and Southern Dynasties, traditional Chinese medicine and the traditional arts of calligraphy, painting, and music formed part of the Chinese cultural tradition and had a fundamental commonality. Huan (2014, 89-94) also points out that the ancients believed that art could only benefit physical and mental health and enhance one's spirituality and creativity if it followed the laws of vital activity. Out of this pursuit, the ancients emphasized the harmonious beauty of the sound, rhythm, and word form of literature and art, as well as the purity and gentleness of its main ideas. "Qi" is the meta-category of classical Chinese literature and the core of traditional Chinese medicine. The Wei, Chin, and Southern and Northern Dynasties were a time of transition in the history of the development of the qi of medicine and the qi of literature, and the two showed a certain degree of collusion. The qi of medicine and the qi of literature were symbiotic in origin. In their development, both valued the movement of qi, the transformation of qi, the nurturing of qi, and innate endowment. The qi of literature ultimately had to be expressed through life. As plagues plagued the Wei-Chin, North, and South Dynasties periods, it is easy to see that the qi of traditional Chinese medicine profoundly impacted the development of the qi of literature during this period.

Further, "qi" is manifested in various forms. Wang Bi of the Three Kingdoms believe: "The same sound corresponds to the same, the height does not have to be even; the same qi seeks the same, the body does not have to be the same." Xing Shuang notes: "the first four, two, five, three on, the same sound corresponding to the same does not have to be evenly high and low also, the same qi seek each other does not have to Qi form and quality." His body and quality refer to form and texture, respectively. Moreover, in the Book of Chin - Biography of Wang Bao of Nanyang, it is mentioned that "Bao had a rich and magnificent physique, and tasted himself as weighing eight hundred pounds." Here the term physique is similar to the meaning of physique in traditional Chinese medicine. In Chinese medicine, the constitution refers to the overall quality of the

organism due to the strength and weakness of the internal organs, meridians, qi, and blood, yin, and yang. It is not fixed and is influenced by both genetic and acquired factors. It is not fixed and is affected by both congenital and acquired influences. It can be considered as a reflection of the qi movement of the body. The physique largely influences the individual's style.

In the history of Chinese literature, scholars of the Wei, Chin, and Northern and Southern Dynasties discovered nature outwardly and the deep love of the self inwardly, returning to themselves to rediscover their bodies (Bai 2009, 87-95). In Metaphysical Immortality, Liu (2007, 407) summarises, "The so-called Wei-Chin style is, in an essential sense, built on the human body. It includes how one disposes of one's body in the face of death, how one uses bodily imagination to express the desire for self-transcendence, how one uses technical practices to circumvent the advent of death, and how one consumes oneself more fervently in the despair of certain death." Yu (2003, 280) points out that "the style of scholars from the Wei and Chin dynasties onwards, holding powder, practicing clear words with their mouths, and walking prudently, was all initiated in the late Eastern Han Dynasty, and was the result of a high degree of development of individual self-consciousness among the scholars."

The Wei, Chin, and North and South Dynasties period was also a period of rapid development of the science of health and wellness in China. The writings on health care during this period have notable characteristics: the prevalence of the "cold food" and "dissolution" categories; the proliferation of Buddhist medical writings; the gradual systematization of Taoist ideas on health care; and the esteem of the emperors of the time (Chen 2010, 9). Ji Kang made the famous assertion that "there are five difficulties in maintaining health ."Ge Hong emphasized the idea of prevention in his "Baopu Zi" and believed that "the essence of health is not to hurt." He used the Taoist theory of Daoism, which originated in pre-Qin Daoism, as the basis of divine and immortal Daoism. He discussed the reality of the divine and the learnability of the immortal way. He took "Xuan, Dao, and Yi" as the theoretical basis for internal cultivation, and "the form and the spirit depend on each other" as an essential principle of health care, requiring the internal practice of qi, channeling, the practice of the house arts, and the external consumption of food, with the building of virtue as a prerequisite for health care. Tao Hongjing inherited Ge Hong's ideas and also pointed out that the essential elements of human life were form and spirit, so he took nourishing form and regulating spirit as the key to nutritional health, and at the same time, proposed a whole set of qigong guidance methods, among which the circumferential massage method applied until the early 20th century. The Taoist philosophy of health care during this period was deeply influenced by the Yellow Emperor's Classic of Internal Medicine; for example, the Taiping Jing inherited the Yellow Emperor's Classic of Internal Medicine, based on the idea that all the five viscera harbor the gods, proposed that "the gods that are in the body" and transformed the body gods into concrete images. The Haunting Jing, based on the concept of the twelve organs of the Yellow Emperor's Classic of Internal Medicine, proposes that the gods of the five viscera and six bowels are the core of the body-god system, and further expands its scope, eventually forming a system of three parts, eight scenes, and twenty-four real gods. Buddhism attaches importance to the transformation of the three karma of body, mouth, and mind, and believes that disease is one of the four great sufferings, which are bound to occur in life, and that health should be based on meditation and quietness but at the same time it is also pointed out that exercise and labor should be done regularly, and that one should "always exercise, always labor, be careful with action, abstain from lust, be careful with food and drink, follow medical advice, avoid calamities and evil play." Thus, the development of traditional Chinese medicine and literature in this period placed the human body in a vital development position and reflected a concern for the physical body in concrete practice.

Further on, this collision was even more pronounced during the Southern Dynasties. It was a period when 'physical weakness' became popular and consequently influenced the creation of poetry and vocal rhythms in the court style of the period, which in turn contributed to the development of the 'weakness' trend, thus creating a fluid cycle. It was not until the end of the Southern dynasty that this cycle was finally broken, not only because of some Confucian literary

critics of the time but also because this trend was highly detrimental to a country in turmoil. Wang Yongping's research also points out that most medical scholars of the highest status and most notable influence in the Northern dynasties came from the Southern dynasties and were mostly from the background of the Jiangzuo scholarly society, which means that there was a deep connection between traditional Chinese medicine and the Jiangzuo scholarly society, which was focused on the physique of both. As a result, both medical developments and literary creations of the period sought physical change. Interestingly, however, the two physique pursuits have taken opposite directions but ultimately formed a cycle of mutual advancement.

Body constitution and its changes

The changes in the physique of the scholars were inseparable from the geographical and social environment of the time. Based on biological research, Mr. Zhu Kezhen (1972, 15-38) deduced that the Eastern Han and Wei-Chin-North and South Dynasties periods belonged to the second cold period. The change in temperature affects a series of climatic elements, such as rainfall. This change led to significant changes in agricultural production during this period, especially in farming practices and food production. At the same time, this climatic change had already significantly affected ecological and agro-pastoral economic regional changes by the time of the Western Chin Dynasty. This led to the entry of the Xiongnu and Xianbei minorities from the north into the Central Plains with the implication of seeking survival. The Five Hu's rebellion against China and the southern migration of the clothed people became logical in the context of the times. To a large extent, natural disasters, warfare, famine, and plague caused by the cold became the underpinnings of survival during the Wei, Chin, and North-South Dynasties. In the pre-Nandu period, the people of Jiangnan relied on abundant wildlife and fish for their survival due to their business's rough and tumble nature. Since Sun Wu, the emphasis has been on agriculture and cereals. Even so, people's eating habits changed considerably. According to Zhang (1998, 15), there was a high incidence of epidemics in our medieval history. All these things inevitably led to the awakening of people's consciousness of life and the importance of the individual in this period. At the same time, as the Southern dynasty was a period of some political stability, but the people were still suffering from war, there needed to be a higher level of adequacy and diversity in the food supply. It can deduce that during the Southern dynasty, the scholars were under high physical and mental stress, mainly contributing to their overall poor physical condition. The addition of the newer scholarly clans did not reverse this.

Further, in the discussion of the classification of physique, there is a classification in terms of the brave and timid nature of nature, which classifies people as brave, timid, and moderate. From this perspective, one can look again at what Cao Pi pointed out in his "Dian Lun - Essay": "Ying yang is not strong, Liu Zhen is strong but not dense." The individual physiognomy that lies behind this could be identified. Another more obvious example is the poetry in the palace style of the Qi and Liang periods of the Southern dynasty and the majestic and powerful poetry of the Northern dynasty of the same period. The Qi and Liang scholars were more refined in their diet, and the natural environment of the south tended to make the local people physically weak, with fire and heat illnesses prevalent. As these scholars worked less physically, their physique was predominantly weak, and their couples were lax, making them very susceptible to external illnesses. The variety of diets, the high calorie and fatty food intake, and the indulgence of the scholars at the time led to the tendency of the southern scholars to gather dampness and produce phlegm. This change in physique influenced poetic style and the political landscape of the time. This is also evident in the majestic and powerful poetry of the Northern dynasty. In addition to war and political turmoil, people in the north were prone to developing a Yang deficiency and dirty, cold constitution, with more physical work and a more substantial, tighter coupled physique. However, at the same time, because they were hungry and full occasionally, they were more mentally resentful and worried and, therefore, more prone to spleen and stomach diseases. People

of this constitution are less susceptible to external illnesses, and their bodies are dexterous and lanky, which is why they have a more exquisite style.

In addition to being a sign of rebellion against the orthodoxy of the Jiangdong scholars, the widespread use of powder (powder taken cold) and wine at the time also aggravated, to a large extent, the liver and spleen pathology of the already coupled southern scholars, resulting in fever. This syndrome was the cause of the strange illnesses of the period and partly the cause of the phenomenon of xingsan, the typical psychotic symptoms of poisoning. A slow onset, a late onset, and difficulty resting characterize this mental abnormality induced by the consumption of gold and stone minerals (Wang 2003, 66-68). During its development or at a later stage, it may lead to personality changes to a large extent. For example, in the biography of Li (2021, 45), it is recorded that "Guang wanted to take a nap earlier, but suddenly he was startled and said to his wife: I was sleeping but not sleeping, and suddenly I saw a person out of my body ..... So he was in a trance and was unhappy, and in a few days, he became ill and could not sleep for years." This is supported by the Censored Prosperity Formula of this period. The Censored and Prosperous Formula locates the root cause of mental abnormalities in the liver, heart, and biliary organs and argues that actual evidence tends to lead to mental exuberance and deficiency evidence tends to lead to mental depression and good grief, which is different from the understanding of the Yellow Emperor's Classic of Internal Medicine and the Nanjing. At the same time, the relationship between mental abnormalities and the brain marrow, as proposed in the Shan Fan formula, further reflects the understanding of psychosis at the time and shows that people were already aware of the enormous impact of drugs on the human mind.

The formula for treating drunkenness after drinking wine for days on end, as found in the "Post-Elbow Precautionary Formula," is a side note to the fact that many people became ill from alcoholism during this period. This is related to the belief that drinking alcohol could help dissolve the body. However, long-term chronic alcoholism could exacerbate internal heat and, as a result, contribute to the toxicity of dissipation. Furthermore, this chronic alcohol abuse was already more than a behavioral disorder and, to a greater extent, would lead to irreversible central nervous system degeneration, with clinical tremors, delirium, and even Korsakoff's syndrome. In addition, the theory of "pancreatic gas disease" causing mental abnormalities was also developed during the Wei-Chin and North-South dynasties. For example, the "Xiao Pin Fang" developed the view of the "Jin Kui Yao Yao" that pancreatic gas is caused by fear and that worry is also a factor. The "Post-Elbow Prescription" further describes the clinical manifestations of pancreatic dolphin based on the "Xiao Pin Fang": "Qi is righteous to both sides of the chest, pain, and fullness under the heart, and Qi rushes up to the chest and wants to die." In the Collection of Experimental Formulae, "deficiencies of the five viscera and cold Qi syncope" are also considered to be a cause.

Physicality and Literature

A prominent feature of the Southern dynasty was that the scholars were particularly frail, and this frailty became a buzzword at the time, leading to the term 'literary frailty' in the Shih-Shuo Hsin-Yu. This term refers not only to physical weakness but also to the flamboyance of the literary style of the time. Thus, there is a strong link between physical fitness and literary style. After the Wei and Chin dynasties, historical records of people who possessed both 'literary' and 'weak' characteristics can be divided into two categories: those who were literary scholars in the Wei and Chin dynasties and those who were scholars in Jiangdong. The former, mainly from the Northern dynasties, emphasize politicians and literati with political aspirations, while the latter, mainly from the Southern dynasties, especially the Southern Liang, show the refined, benevolent, and generous temperament of the Jiangdong scholars (Dong 2014, 43-48). The frailty of this period became a foil for the political talent and temperament of the scholars, who could not stop their talents and political aptitude because of their frailty. For example, in Shih-Shuo Hsin-Yu (Yu 1983, 433), the description of Lu Ji and Lu Yun in Shilong was a man, weak and lovely.

Shiheng was more than seven feet long, his voice was a flood of bells, and his words were generous." Sequel to Jin Yang Qiu (Tan 1989, 256-257): "The emperor was born in the third year of Taixing, weak but wise and different, and Zhongzong deeply appreciated his ..... The emperor in the family of the country's send, with the Zhanzhan, returned, and the self-asserted weakness of the text, no to resist." Song Shu - Yin Yan Zhuan (Shen 1974, 2207): "Xiuyou said in a letter to Yan: "You are a weak scholar and have no military ability; you are known from far and near, and you are famous and clear, so you should not be covered." Here the term "weak and civilized" refers to the temperament and appearance of beauty.

The Southern Liang dynasty was crucial in establishing the 'orthodoxy and distinctiveness' of the southern 'Wu' culture (Tian 2010, 74-113). This was partly due to the development of literary criticism during the Six Dynasties, which was based on Confucian standards and criticized the flamboyant literary style of the time. Secondly, the loss of political rights and the change in the mentality of the scholarly clan began to turn to literature (Xu 1995, 89-94). In fact, during the Southern Liang period, Confucian values became the cultural consciousness of literary writing and dominated the development of that consciousness. For example, Xiao Tong's Selected Writings of the Southern Liang Dynasty elevated rhetorical writing to "transforming the world." Liu's compilation of The Literary Mind and the Carving of Dragons was also based on Confucianism, establishing the standard of rhetoric in writing.

As the Southern dynasty established a sense of incorporating the values of the scholar into literary writing, the notion that the body was 'weak' as a symbol of literary elegance began to take hold, and the 'weak' instrument became the external image that the elegant scholar wished to project. Thus, the expression 'although his form is weak, his writing is powerful,' as Pei Zinye calls it, emerged (Yao 1973, 443). Another example is the Book of the Southern Qi (Xiao 1972, 710): "Zi Long was twenty-one years old, but his body was too full and strong, and he used to take pills made of squid bones and madder to damage himself."

It is important to note that this weakness is very different from the licentiousness of the famous scholars of Luoyang in the Wei and Chin dynasties. The social turmoil of the Wei and Chin dynasties led to an ideology of timely pleasure in the arts, with the outward manifestation of licentiousness and some grotesque behavior but the inward manifestation of a cherished sense of affirmation. This led to a tendency for literary scholars to find spiritual support in literature and art on the one hand and to indulge in wine and drugs to numb themselves and find ways to prolong their lives on the other. During the Southern dynasty, due to the decline in the power of the gentry and scholars and the gradual return of power to the imperial family, as well as the influence of the policy of valuing people with low incomes during the Liu and Song dynasties, there were many emerging aristocrats among the so-called Jiangdong nobility formed during the Southern dynasties, most of whom were skilled in the art of prescription and many of whom had been practicing medicine for generations. This, of course, was also very much related to the development of medical hereditary and family-oriented medicine at the time.

As a result, a group of scholars with medical knowledge, either to retain their status or to extend their sphere of influence, chose to associate with the older scholars, who thus became involved in the literature of the period and promoted the inclusion of scribes in the amateur or professional ranks of ancient medicine and health care. The Confucianism and metaphysics prevalent during this period also led to the development of Confucian and Taoist medicine. Thus, the phenomenon of the 'humanization' of medicine emerged. In the pursuit of personal immortality, the 'humanized' medicine developed the arts of channeling and housekeeping or sought the help of elixirs, and in their literary creations, they tried to show their pursuit of immortality and immortality. For example, Gan Bao's The Book of the Searching Gods and the famous doctor Tao Hongjing's The Book of Zhou's Meditations. It is important to note that Tao Hongjing began to have the ambition to maintain health after reading Ge Hong's The Legend of the Immortals, and therefore studied medicine and continued to search for immortal medicines. The indirect influence of literature on the development of medicine is evident here.

The importance of the body and the awakening of individuality led the Wei-Chin scholars to pursue physical beauty, a shiny beauty such as the fairness and tenderness of the skin prompted by food. As far as dress was concerned, the famous scholars of the Wei and Chin dynasties were fond of wearing wide clothes, preferred literary decorations, and used powder on their faces every time. In the Liu and Song dynasties, Zhou Lang reveals that this fashionable dress among scholars had already impacted ordinary people's dress. In terms of literature, the weak southern culture was disliked in the northern dynasties, and the phrase 'and the weak culture of Erzhe' was used in connection with its subservient and flamboyant style of writing.

In fact, during the Liu and Song dynasties, and even earlier, the ruling class had already realized that idle talk would not be able to achieve anything, so in the late Wei, Chin, and Northern Dynasties, when the royal power could restrain the gentry and scholarly clans, the scholars turned more to literature, thus focusing too much on technique and leading to an over-emphasis on literature. As a result, the use of powder taken cold by scholars after this time was no longer an achievement of the so-called Wei-Chin style but a tool for the gentry and the ruling class to manifest their status, escape illness, and even immortality. They could no longer indulge in the same kind of debauchery as the famous scholars of the beginning. At the same time, most of them came from humble backgrounds without deep cultural deposits, thus causing them to lose their interest in metaphysical discourse and thus to turn to the pursuit of formal beauty and the importance of music.

This change in aesthetic consciousness led to a tendency for a stratum of scholars to emphasize the external beauty of women and their appearance (Liu 2009, 17-19). In order to present the noble and superior status of the scholar and the influence of the southern Wu culture, the emerging Jiangdong aristocracy took physical softness as their beauty. It combined it with creating poetry in the palace style, presenting a striking image. In other words, physical weakness had become an important physical feature of the literary style of the time, and because they were weak and noble Jiangdong scholars, the palace poems were not vulgar, not fulsome, but elegant art. This is one of the reasons why the poems in the palace style focus on allusions, vocal rhythm, and the pursuit of rhetoric. The genre and the literary style have become inseparable and are emphasized and valued in this literary style, which was popular among the folk and the scholarly.

Conclusions

The emphasis on personal physique during the Southern Dynasties strengthened the relationship between traditional Chinese medicine and literature. The literature of this period reflects the importance of physical fitness, the pursuit of longevity, and the dislocation of people who, in reality, sought to manifest their status and identity by taking frailty as a sign of beauty and identity. In any case, this dislocation has driven the development of traditional medicine and, to some extent, presupposes it. The same or opposite pursuits of both in terms of physicality ultimately drove their respective developments and resonated and circulated as a whole. This is a characteristic of the development of literature and medicine in this period. However, it also suggests that we must pay attention to an interesting phenomenon in East Asian studies that emerges in different contexts of history. Such phenomena are related to the social context of the time, on the one hand, and to the ancient cultural roots of East Asia, on the other.

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The Canonical Framework for the Exercise of Church Law in Orthodoxy

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ABSTRACT: From the beginning of the Church, the Christian faithful, vested with the authority of Jesus Christ and the Holy Apostles, have constantly stressed the importance of divine ordinances. In the Gospel of St John the Apostle, Christ reveals his central role in the work of the Church: "I am the way, the truth and the life" (John 14:6). On the basis of this truth, the Church's right to work for the Kingdom lies in the assumption of Christ, the supreme measure and model of all creation. Therefore, the Canon of the Church is founded on the work and teaching of Christ, the Head who realizes and keeps alive and whole the ecclesiological community. In this perspective, the Church's ordinance is the support of the saving work, the structure in which are methodically and systematically framed the elements of canon law by which the Church organizes and regulates its works in such a way as to contribute to the spiritual development of the Christian community, which is assured that it is always supported to advance on the path of salvation together with the community of believers who have already assumed, in good ordinance, life in Christ through communion with the Holy Mysteries.

KEYWORDS: church law, church canons, church judgment, church life

The order of church life and the necessity of church law

Since the emergence of the first Christian communities, the sacred text of the Holy Scriptures has been considered the basic source of the way in which the community life of believers should be structured. The concern of the early Christians to live in Christ-likeness is described by St Paul in his Epistle to the Galatians: „I am crucified with Christ: nevertheless I live; yet not I, but Christ liveth in me: and the life which I now live in the flesh I live by the faith of the Son of God, who loved me, and gave himself for me" (Galatians 2:20). The scriptural passage exhaustively constitutes the argument why Christians, beginning with the Holy Apostles, were firmly convinced that Christ Himself is the supreme model, the absolute type of all Christian life and ordinances. Christ has been and remains the structure and framework of the Church's canon, and what He has instituted is the total commitment which every believer must assume as a new covenant.

Thus, the first norms of Christian life are based on Christ and Holy Scripture, to which the Church is fully committed (Rotaru 2014, 23-44). The pastoral work of the Apostles was carried out on the same basis. From the beginning they exercised their missionary and pastoral ministry in the name of the Church. Their meetings with the other ecclesiological communities, the epistles which they addressed in order to set in order the new local Churches in the neighbourhood or far away, lay the foundations of ecclesiastical law as the universal canon law of the Church. The Apostles, as representatives of Christ, gathered at the Synod of Jerusalem, represent and constitute the Church itself in its integrity. Their authority is the authority of Christ, and the communities of Christians who receive the norms established by them accept them sine qua non through faith in Christ and the work of the Holy Spirit.

The model of Christian life, the relationships between believers as described in the book of Acts, became the measure of church life and a genuine way of communication between the different local Churches. In this way the path of dialogue between the Churches was built on the structure of the rules of Christian communication in a natural way. By respecting these rules, Christian identity was acquired. Springing from the source of life, which is Christ (Rotaru 2012, 5), generating life in the name of Christ in the ecclesiological community as the

Body of Christ, the Church gathered these rules into a canonical unity and shared them with all the local ecclesial communities so that they could grow and keep the new teaching pure.

Christian history has witnessed the perpetuation of this paradigm which has become a general model of assumption at ecclesial level of the canonical experiences already deepened by the local Churches. An emblematic event in this sense, founding canonical order, is the Synod of Sardica (343), where Osius of Cordoba asks those present to assume a canonical analysis of their own experience of church life. This Synod would later decide to apply this practice to the whole Church. Canon 10 Sardica stated, "Bishop Ossius said, 'I also consider it necessary that it be examined with all care and diligence that if any rich man or scholastic of the forum should be worthy of becoming a bishop, that he should not first sit in the episcopate until he has fulfilled the office of a curate, and of a deacon, and of a presbyter, so that by each step, if he should deem himself worthy, he may progress to the episcopate. And he shall have the degree of each step for a length of time, of course not too short, by which his faith and honesty of morals, and his good character and good behavior may be known; and being counted worthy of the divine priesthood, he shall enjoy the highest honor. For it is not fitting, nor is it proper, that either the bishop, or the presbyter, or the deacon, or the deacon, should be so boldly and lightly disposed towards the episcopate, that they should be counted as neophytes; For even the Most Blessed Apostle, who was also the teacher of the Gentiles, is seen to have prevented the establishment of the hierarchical steps from being made too hastily; for research made over a longer period of time will be able to show the life and morals of each one according to what is fitting." They all said that they agreed and that these should not be abolished" (Floca 1976, 720-726).

By the decisions of the Trulan Synod the Canons of Sardica will be addressed and received by the whole Church and will be recognized as Holy Canons. Therefore, the Holy Canons are expressions of ecclesial experience that have been formulated and recorded synodically.

The canonical message of the Christian experience, which the ecclesiological communities founded by the Holy Apostles and their direct disciples transmitted to the sister churches thanks to both the prestige and the experience of their authors, acquired an ever greater scope and authority for those who approached the right teaching (Phidas 2008, 17). This becomes relevant if we note that the first normative aspects of the Church canons deal with both the problem of the laity and the problem of heretics, which generated the need to define the human dimensions of the Christian community, in order to give a useful definition to the Church, understood as a reality made up of people prone to temptation and sin, who need support to return to the pure, just and natural state for which they were created (Kniaseff 1980, 5).

The local synods, having initially had a simple character of meeting, aiming at consolidating the doctrine and the ecclesiastical order, received the previous ecclesiastical experiences, assumed disciplinary aspects specific to their period and gave them the character of canons for the improvement of the Church life. By observing the content and mainly the problems to which these canons respond, we can also identify the problems which the Church has faced in each historical period. We must not lose sight of the fact that, although they were conceived as ordinances of Church life, by their promulgation by the Byzantine emperors the canons became imperial laws. This promulgation increased their authority but, at the same time, led to a legality of their reception.

With the recognition of the major synods as ecumenical synods, the canonical texts they produced were also received as the disciplinary aspects through which Church doctrine is embodied in everyday life. The most important moment of this reception is given by the Trulan Synod, which proceeded to a systematization of the previous canonical tradition and thus we can now speak of a first codification of the canons of the Orthodox Church (Stan 1969, 629).

Jumping ex abrupto over time, in order to point out the interest of the Romanian Orthodox Church towards the canon of ecclesiastical law, we will only recall that in the Romanian Countries, from the second half of the 19th century, canon law became a subject of study in theological schools (Stan 1968, 3-11). Andrei Saguna was the first hierarch who treated canon law. His works *Elementele direito canonic* and *Compendiul de Drept canonic* are written in Romanian and are distinguished by their original thinking, which shows the author's academic training. For this reason, the Compendium was translated and printed in several languages, such as in Bulgarian in 1871 and then in Russian in Saint Petersburg in 1872 (Stan 1968, 3-11).

Between 1905-1907, the three-volume work *Oriental Canon Law* appeared in Bucharest, authored by Marin Theodorian-Carada. This was followed by Chiru Costescu's *Collection of Laws, Regulations, Canons*, also in three volumes: vol. I - 1916; vol. II - 1925; vol. III - 1931. But the most important collection of Orthodox canons is entitled *Canons of the Orthodox Church with Commentaries*, and will be the work of Nicodemus Milas, Serbian Bishop of Zadar. It was translated into Romanian in Arad by Nicolae Popovici and Uroș Kovincici, and saw the light of print in two volumes between 1930 and 1936. For a detailed account of how canon law has evolved as a discipline (see Constantinescu 2010; Coman 1969, 399-409).

With all their complexity, the holy canons are not sufficient to cover all the activity of Church life. They do, however, largely reflect the way in which the Church has engaged with and taken up the challenges of the times (Șesan 1936, 147). Because of this, they offer us the opportunity to trace events and manifestations which have contributed to the development of canonical consciousness and which, together with the traditional elements of canon law custom and the specific norms of local Churches, contribute to canonical resolutions in distinct situations facing the Church. Therefore, understanding that it is not possible to speak of absolute criteria by which canonical conscience can be evaluated, it is necessary, in order to define the canonical dimension of ecclesial experience, to refer to the whole canonical tradition which "expresses not only an independent or horizontal development of a juridical positivism in the historical life of the Church, but the vertical authenticity of its historical relationship with the truth lived and held by the Church in the Holy Spirit" (Phidas 2008, 40).

The fact that canonical custom can be defined as an expression of ecclesial experience received, approved and tacitly practiced by a unanimous consensus of the Church is confirmed by Canon 39 Trulan, which enshrines the value of custom in law, making it clear that what the local Churches have agreed must be observed is worthy of continued application.

In the Canonical Tradition of the Church, along with the canonical custom and the Holy Canons, there are also the ecclesiastical norms. These have resulted from the experience of local Churches and the way they have dealt with the problems they have encountered. The norms which they developed and which have subsequently been observed in even more local Churches, based on the same canonical conscience, were issued on the basis of the principle of autonomy and autocephaly. As such, both the Canonical Charter of the autonomous or autocephalous Church and the Statutes of Organisation and Functioning of the autonomous or autocephalous Churches, as well as the decisions which the local Church authorities have motivated, have been accepted throughout the Church as Church norms or as Church legislation, emphasizing that the local Church, as a Sovereign Church, has the same authority to issue normative texts which can become binding, both in that jurisdictional area and where it is necessary to have recourse to them when similar cases arise in other jurisdictions of the Church. This canonical universality of the ecclesiological area is dogmatically based on the fact that in the Church, the Body of Christ, the Spirit manifests himself as the organic co-responsibility of the whole ecclesial body, both clergy and laity. It is a reality that, in the canonical context, is constituted as an organic principle (Clement 1968, 10-36).

The harmony of this ecclesial communion is manifested as an organic principle on the one hand in the episcopal synods and, to the same extent, in the joint bodies, which are made up of bishops, clergy and laity (Schneider 2008). Within this type of co-responsibility, in the original sense of the term, the role of exarch is played by the primate or proconsul recognized as exarch (Blondel 2013,63), who is like a choral conductor who enhances the individual voices by articulating them harmoniously. The cleric invested with the authority of the Church, as protos, exercises his ministry together with all those present, just as the choirmaster expresses himself through the voice of the orchestra. This is why, in the Church, all the choirs have to master the parts they have to perform very well, in order to highlight their vocation and thus contribute to the achievement of ecclesiological harmony.

This harmony, present in decision-making about the life of the Church, underpins the work of clergy and laity and helps to highlight the vocation and charisms that Christians possess both in common and separately. It is a co-responsibility under the direct governance of the ecclesial conscience, the organ of interpretation and application of the canonical ordinances according to the teaching of faith. This harmonious type of the ecclesiological canon, specific to the ecclesiological space, should not be confused with a social co-responsibility typical of popular democratic manifestation. Father Liviu Stan, a firm supporter of the principle of the bishops, clergy and faithful together, i.e. of the principle of co-responsibility in the Church, pointed out that "any corporation or mixed synod alongside the bishop or the bishopric must be considered as a consultative forum" (Stan 1938,119), which is why "the bishop remains the supreme authority in the Church, the mixed synod does not take this authority upon itself, but remains the main consultative forum" (Stan 1938,119). In the same sense he goes on to specify: "equality of votes between bishops and other lay representatives cannot be tolerated, because we would end up with the anticanonical aberration that in an assembly composed of bishops and laity in which the laity would be in the majority, the bishops would be forced to carry out some decisions against their canonical will and thus the episcopal character of the Church organization would be abolished" (Stan 1970, 9). In the Church, therefore, "each part must be in its place, observing its own role and duties, and not attempting any arrogation of extraneous powers, for this would produce disturbance and imbalance which does not build up the Church, but may destroy it" (Stan 1938,119).

According to canon law, an ecclesiastical ordinance is correctly applied by assuming its letter and spirit when the vocation for which it was formulated is deeply respected. In the correct application of canonical norms, rigor also implies careful attention to the specific circumstances of each individual case, so that the application of the norm contributes to and follows the attainment of the purpose for which it is decided. For this reason, in each individual case, the ecclesiastical court must take into account the specific circumstances in applying the norm. The particular manifestation of canonical norms is achieved through care and leniency. When the norm is applied beyond its traditional internal meanings, new meanings of old canons emerge. In such a situation, therefore, the Church exercises its canonical right of iconomy, which gives it the right to treat an exceptional and punctual manifestation as an exception to the norm. As such, the Church's canonical tradition reveals that iconomy is a complex ecclesial act through which canonical norms are particularised and thus become canonical principles (Dură 1999, 200) whose structure is realized on the basis of acrimony and pogrom, as attributes of iconomy that define the Church's ministry and work, and make up its organizational structure.

The Church's authority to judge

Christ reveals His supreme authority to the world in the words, "All power is given unto me in heaven and in earth." (Matthew 28:18) It is on the basis of this supreme, divine power that He

addresses His followers: "Go therefore and teach all nations (that is, in the name of this principle proclaim it everywhere), baptizing them in the name of the Father and of the Son and of the Holy Spirit, teaching them to observe all that I have commanded you" (Matthew 28:18-20). In these two dogmatic foundations we find the key to the Church's organizational structure based on the relationship between authority, power and responsibility within the ecclesiological space.

The first statement is clear because it reveals that Christ is the source of one's decisions. That everything He says is a truism and, as such, His will is not separate from God's will because He is God. The second part, however, has nuances that require a tailored approach, because by "teaching them to observe all that I have commanded you" Christ, in addition to specifying exactly what the apostles and their followers have to do, also reveals the teaching, pedagogical dimension of the Church, whereby she must address the world to Christ by her own example. In other words, the Church must be the first guardian and keeper of the divine commandments in order to bring forth "new disciples from water and spirit" (John 3:5) through the sacraments.

This type of disciples respects and fulfills the Church's commandments because, in complete freedom, they cherish Christ. It is a fundamental nuance in understanding how the Church's canons work in the relationship between ministry and ecclesial responsibility, but also how it is necessary for those being shepherded to freely engage and assume the fulfillment of the commandments and observance of the canons by understanding the responsibilities they have in the saving work of the Church. It is a matter of being aware and assuming freely and above all responsibly the status of disciple and accepting with esteem the teaching on spiritual fatherhood.

The status of the apprentice reveals the responsibility he has acquired by taking on the apprenticeship act he has to fulfill. If the commitment that the disciple has assumed is not followed with holiness, the spiritual father has the right, with acuteness, leniency and power, to rebuke him towards correction, following the model of a loving and humble father. Therefore, through the canonical ordinance, the Church does not aggressively enforce the observance of the commandments, but by its own example of service, reveals to all the supreme way to make disciples. This spiritual method, however, is not without authority, because its power of decision resides in the authoritative power of Christ.

This way of administering the canons of the Church, by interweaving the work of spiritual paternity with the full commitment of discipleship, in no way diminishes or nullifies the authority of the canons of the Church, because they are expressions of the living relationship between "the authority and the source of ecclesial authority which is Christ, the unseen perfecter of the sacramental work" (Patriciu 2013, 9), the One who "touches human flesh in a visible and perceptible way through those chosen by Him (Patriciu 2013, 9)." Father Stăniloae highlights both the complexity of this canonical relationship and its importance, pointing out that, "since the Body of Christ has become - through the ascension - pneumatalized and invisible, while remaining nevertheless a joined body, the touch of our body by His Body is no longer visible. In order to touch us visibly, Christ uses the matter with which our body is connected. Christ sanctifies us by using the material that has a special role in human life: bread, water, wine, oil" (Stăniloae 1978,12).

Just as Christ most effectively accomplishes the sacramental ministry through interpersonal relationship, building this interweaving on the work of the person who freely chooses and accepts to remain Christ's sharers through ordination (Stăniloae 1978,18), so in the common, ecclesiological collaboration between bishop, priest and faithful, the Church's ordinances are canonically accomplished by the authority of Christ, who is fully at work in them. The act of electing a person and empowering him or her, endowing him or her with the dignity of Christ by the Church in order to perform the sacraments, constitutes the sharing of Christ's work and knowledge. In this process of deification, the canons of the Church

represent the guardian angel who watches over the authentic preservation of His Word throughout the Church as a means of correction and unity (Stăniloae 1978,20).

These are the dogmatic arguments for which the Church and those who are invested with the authority of Christ exercise the ministry of judgment. It is natural, therefore, that the Church's judgment should spring from a correct and, of course, above all loving parental attitude, constantly concerned to correct the one who has erred in order to save him. As such, because the authority of the judges who impart the justice of Christ in the name of the Church is reinforced by Christ Himself, Who is the supreme judge, all those who undertake the fulfillment of ecclesiastical judgment must commit themselves fully and with great earnestness to the observance of the teachings of Christ, Who so taught and admonished the Holy Apostles: "If thy brother shall err unto thee, go, rebuke him between thee and himself. And if he obeys you, you have won your brother. And if he does not obey you, take one or two others with you, so that from the mouth of two or three witnesses the whole word may be established. And if he will not listen to them either, tell it to the Church; and if he will not listen to the Church either, let him be to you as a heathen and a publican" (Matthew 18:15-17).

Here the Church's acumen in the application of the canons is evident, for she must look very carefully at each individual case and take into account the wisdom of the person being judged. At the same time, it must not forget to examine with care the spiritual maturity and moral capacities which the accused has developed. His power to humble himself and to accept to listen towards correction. At the same time, Christ emphasizes the role of witnesses in finding the truth so that: "out of the mouth of two or three witnesses let every word stand" (Matthew 18:16). Being reproved towards correction, through the witnesses' references, the person before the court will personally analyse himself through what they have said and thus, by introducing into the act of justice several distinct views, the horizon of a personal choice in making a decision is exceeded, which is why the court can correctly and accurately appeal to the best canons that can be administered towards the sinner's correction. Canon 5 of the First Ecumenical Council highlights the role of witnesses for the purpose of a just judgment. Canon 5 of the First Ecumenical Council: 'As regards those who have been excommunicated (afflicted) ... let it be examined, however, whether they have become excommunicated because of the impoverishment of soul (smallness of soul) or because of malice or any other such fall of the bishop. Therefore, in order that this may be investigated as it is expedient, it was thought (seemed) good to have synods every year, twice a year, in each diocese (metropolis), so that the body of all the bishops of the diocese (metropolis) gathered together might investigate questions of this kind..."(Floca 1991, 18).

Conclusions

All ecclesiological ministries, including those which include jurisdiction and judgement of the faithful, the Church performs in a general pastoral setting, being continually concerned to exercise them with authority and in the name of Christ. The Church's judgement is to be carried out only for the sake of correction and a constant learning to assume the divine commandments, through which human freedom and dignity (Rotaru 2016, 29-43) are enriched in Christ (Rotaru 2019, 201-205). As those responsible for the work of the Church, the bishop and the priest have the duty to be always overwhelmed by the fulfillment of a just, correct and lively preaching in the ecclesiological space. They must therefore be the first to respect and fulfil the teaching and canons of the Church. However, assuming these responsibilities means going beyond individual responsibilities, because the service that Christ demands means total openness to the other. The framework of hierarchical-synodal co-responsibility here defines the way in which the Church is called to assume responsibility for the application of the canons and especially for the carrying out of the judgment of Christ in whose name human justice is fulfilled through the bodies invested with authority to carry out ecclesial judgment.

The canons and the judgment of the Church are part of the ministry of God's Word. This is the foundation of the work done in the ecclesiological area according to the Gospel text: "Therefore go and teach all nations... teaching them to observe all that I have commanded you" (Matthew 28:18-19). The right and correct preaching of God's word gives meaning to the sacramental ministry of the Church, which becomes fruitful through the believers' assumption of voluntary and conscious communion with the divine person.

On the basis of the teaching of faith, the Holy Canons and the custom of canon law, the Church has generated and perfected the fundamental principles of its operating space. In turn, these decisions, which sprang from the concrete experiences of the Church's life, have been framed as her canonical principles. Canonical principles therefore lose all value if they are dissociated from the Church's work and "vocation (Rotaru 2022, 585-595). This is why their analysis and assumption must be carried out in a pastoral-missionary framework.

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Art vs. Product

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ABSTRACT: We are witnessing the development and opening of an increasing number of art schools and colleges. The curriculum covered by these organizations is versatile and comprehensive encompassing various emerging branches. However, a fundamental question arises: can inspired works of art be created when they are dictated by market demands and order, and to what extent mediocrity and kitsch are involved in such a process? Commercialism, pop, and marketing are susceptible areas when we talk about creation. The pandemic and the lockdown provided a unique opportunity to think, envision the future, and express our ideas. Art in the field of the market is looking for its place. Education needs to be directed and distracted from the automatic repetition of facts by increasing the level of "general culture" and encouraging pupils and students to focus on problem-solving so that they can use all available materials and resources. This kind of education enables the development of innovation rather than the complete repetition of facts. Nowadays, various media platforms and libraries inundate society with ideas and information. Progressing personally and contributing to society requires hard work. History represents the past, while homology teaches us how to upgrade and shape knowledge, but if we get stuck learning, we risk perpetuating old patterns through imitation. Therefore, it is crucial to look ahead, address problems and facilitate the enrichment of humanity's collective experience while upholding ethical principles and moral imperatives. This article emphasizes that art has a special place in this dynamic world.

KEYWORDS: art, product, marketing, education, innovation, creativity

1. Introduction

The time in which we live is full of information, the development of technologies, and industrial production. However, unfortunately, people equate their life, role, and value with material possessions, earnings, and money. Many works of art have no monetary value because these tools cannot measure the trends of inspiration and cognition. History has left us in various directions in art, the development of human consciousness, and the understanding of society, man, and his experiences more complex than mere photographic replication of the environment. Numerous art schools and academies are opening, and art seeks to connect with all aspects of human life. Multiple artistic directions are emerging: self-proclaimed, unaccepted, and commercial art. After schooling, individuals cautiously approach the name "being an artist, " despite their training and knowledge." At the same time, the multitude of people who create or instead form something -call themselves "self-proclaimed" artists. Art is impossible to define. Books are written and analyzed, sorted into various styles and branches, but the border is thin. In the category of artists, someone tries to put charlatans, kitsch, commercialism, and cheap creation for the masses. There are also some industrial branches of art, such as the film industry, applied arts, and graphic design.

Questionable is whether life, living, and nature can consider the most sublime art and whether man's creation merely imitates the creator. In calling for art's importance, it associates with all branches of activity, from science, technology, industry, upbringing, and education.

The analysis is whether today's art is the art of earning or expression. The artist is motivated to create an intriguing need to send a message or a vision or to sell and execute an order to the client within a specific price.

2. Art

2.1. Etymology of art

"Art" refers to the Latin word "ars," meaning art, skill, or craft. The first known use of the word art comes from a 13th-century manuscript. Nevertheless, the word art and its numerous variants (Artem, Ars.) have existed since the founding of Rome. Etymologically, the word art comes from the Latin ars, artist, and the Greek τέχνη (téchne), meaning "technique." In antiquity, art called for occupations such as blacksmithing and disciplines such as poetry, painting, or music (Encyclopedia - Struna 2004, 348)

2.2. Definition of Art

"Art is a set of disciplines or production of a human being for aesthetic and symbolic purposes based on a particular set of criteria, rules, and techniques." (Hrvatska Enciklopedija 2014, 247). Art is genuinely multiple categories, unknown as the soul itself. For real creators, art is much more significant and global than work. For them, it is the true meaning of life. Art seeks to present, in different ways, the universe of human concerns, whether real or imagined, using symbols or allegories. Art is the totality of human spiritual activity through how aesthetic experience is expressed, including the creation, the created work, and the experience of the work. Like art, there is a tendency to translate a work into objective existence by shaping feelings or ideas along with subsequent actions in the context of the work. The source of art is the cognition of an idea within which the subject is free from its individuality. Issue disappears in the object of art. Its message reveals that art is a uniquely human activity whose meaning constitutes a complex communication process between the artist, the work of art, and the audience. People have questioned art in different historical periods, but since the beginning of the modern era, we tend to attribute the following characteristics: Each work of art has its own highly developed and autonomous language; Art has an independent and free position in society; Art has no socially prescribed purpose; The purpose of art lies in fulfilling its contemporary defined nature, determined by the ideas of freedom, imagination, individuality, discovery, experiment, rebellion, beauty, truth, justice (mainly the ideas on which Western society is based in most of its segments such as the French Revolution.)The world, in modern society, does not only do what we see, hear, read, and touch but what we perceive as an art object. The "invisible" world of knowledge is about art, history, language, and rapid and current movements. We meditate on numerous cultural institutions (museums, galleries, libraries, publishers, art critics, concert halls, opera houses, art theory, and aesthetics.). Art is a curious kind of human activity. Consciousness can create - bringing into our material world what never existed. Art is often associated with creativity, but creativity is still a less significant category than art. Many artists paint; they are creative, but only some authors' work will be a generally recognized art or a cultural heritage. Creativity, together with art, satisfies the most critical spiritual needs of a person in self-expression. Art is a game of images created from imagination, which we manage to realize in real life.

2.3. Philosophy of art

Different artistic forms and periods are the subjects of systematic interpretations of aesthetics or aesthetic-philosophical theses of individual authors. The question of what art is has been debated among philosophers for centuries: "What is art?"

The most fundamental question in the philosophy of aesthetics is, "How will we determine what defines art?" This opinion implies two subtexts: the essential nature of art and its social significance (or lack thereof). Art can only be defined to meet one's criteria. A good explanation found in Webster's Ninth New College Dictionary says that art is "the conscious use of skill and creative imagination, especially (apparently) in the production of aesthetic objects." Based on this, the artist needs skill and creative imagination. When he puts these two abilities to work, he can create something that others find satisfying or attractive.

Immanuel Kant (1991, 198) was one of the most influential early theorists of the late 18th century. He considered it formalism in the sense of his philosophy. This meant that he believed that art should not have a concept but that it should be treated independently of formal properties and that the content of the work of art is not of aesthetic interest. On the other hand, science deals with acquiring and distributing human knowledge, and a rational approach to reality is crucial" (Kant 1991, 203).

Art is a unique form of cognition created by intuition. Intuition is the ability to predict, that is, the understanding that occurs before thinking and intellectual (logical) consciousness. Intuition is the knowledge used by imagination, not by the intellect, which is usually considered the creator of understanding.

It is always known individually and never in general. Intuition creates an image, while intellect creates a concept. It follows that art is cognition by instinct instead of science or philosophy in which consciousness is realized by reason." Understanding, which contained misunderstanding."

For the mathematical measurement of works of art, the instrumentation of geometry shows the basic format of the theorist. Such an interpretation of the work of art inspired Schopenhauer's advice to approach the painting like a king, waiting for the first to speak to us.

2.4. Quotes

There are as many ways to define art as there are people in the universe, and each definition affects that person's unique perspective, personality, and character. The following are a few sources that illustrate this range.

"Art evokes a secret without which the world would not exist." – Rene Magritte.

"Art is the discovery and development of the elementary principles of nature in beautiful forms suitable for human use." – Frank Lloyd Wright.

"Art allows us to find and get lost simultaneously." – Thomas Merton

"The purpose of art is to wash the dust of everyday life from our souls." – Pablo Picasso

"All art is only an imitation of nature." – Lucius Annaeus Seneca

"Art is not what you see but what you convince others." – Edgar Degas

"Art is the signature of civilizations." – Jean Sibelius

"Art is a human activity which consists in the fact that one man is conscious, using some external signs, gives to other feelings through which he has lived and that others are infected by these feelings and experience them" – Leo Nikolayevich Tolstoy

"Art is the making of ideas. Passion, violent or not, must never be expressed to cross the line of taste. And music, even when we are in the most terrible trouble, must never hurt our ears, but should flatter and seduce us". – Wolfgang Amadeus Mozart

"An artist is a hand that purposefully brings the human soul into vibration through this or that key." – Vasily Kandinsky

"An artist is nothing without talent, and talent is nothing without work." – Emile Zola

"Poets are interpreters of incomprehensible inspirations." – Percy Bysshe Shelley

"The whole world is a stage, and all men and women are just actors. They come on stage and off the stage, and during their lifetime, one human played many times." – Antun Gustav Matoš

"The artist belongs to his work, not the artist's work." – Georg Freiherr von Hardenberg

"The freedom to create depends on how obsessed you are with success." – Larry David

"We look at the past through the veil of art, and art, fortunately, still understands how to disguise reality." – Oscar Wilde

"Art lives within the obstacles it sets for itself and dies within others." – Albert Camus

"Real art is first and foremost the one that moves a kind of emotional wire in us, the one that upsets us in the most intimate feelings"– Ingmar Bergman

"Science and art are closely connected, like the heart and the lungs, and if one is damaged, the other cannot function properly." – Leo Nikolayevich Tolstoy

"Every work of art is a child of its time, and often, it is also the mother of our feelings." – Vasily Kandinsky

"Painting can be better shown on a palette than expressed in words."– Vincent van Gogh

"Artists who seek perfection in everything cannot achieve it in anything." – Eugene Delacroix

"Art is more valuable than truth." – Dionysius

"By changing people, the music changes the world." – Bono Vox

"Finding a form to describe the mess is the artist's job." – Samuel Beckett

"It is not painted with colors but with feelings."– Jean-Baptist Chardin

"For a work of art to be completely innovative, it must be written or painted in a complete paradox, and it cannot exist because otherwise, the artist would have to suffer from amnesia." – Manuel Frias Martins

"It is the artist's job to create, not to speak." – Johann Wolfgang von Goethe

"Art is not useful, but it is necessary." – La Corbusier

"It is up to art to create beautiful things, and it is up to a businessman to make economists." – Elbert Hubbard

"A great artist never sees things as they are." – Oscar Wilde

"Nothing that isn't practical can be beautiful." – Otto Wagner

"A man who writes well does not register as he writes, but he writes." – Louis de Montesquieu

"Art is always independent of life, and its color never reflects the color of the flag over the city fortress." – Viktor Shklovsky

"In art, it is like this: whoever is on the right path, no bad criticism can turn him off the right direction, and whoever is on the wrong way, no good criticism can lead him on the right path." – Matko Peić

"All the actor owns is his heart. It is a place where inspiration sough." – Meryl Streep

3. Product

3.1. Product definition

A product is the material result of production - everything we can offer someone to satisfy their need or desire (Hrvatska Enciklopedija 2014, 677). A total product - a set of tangible and intangible attributes that meet a consumer's need–can be a physical product, service, or a combination thereof, the result of human work in the material or spiritual creation made with the intention and plan. The product can be classified into three groups satisfying practical, spiritual, or aesthetic needs:

- Consumables - consumed in one or more uses
- Durable goods - that withstand repeated use
- Services - activities offered for sale.

When we use the term product, we come across various definitions. A product is a thing or object manufactured or invented of a material made by a natural or industrial process for the consumption or utility of individuals. A product is a generic term by which we can mean goods and services. A product is everything a company offers to consumers to meet their needs: a product resulting from a production activity that materializes in the economy. (Encyclopedia - Struna 2022, 675) Regardless of that activity, goods after manufacturing acquire an independent existence in their subject form. With its functional properties, it can satisfy a specific types of human needs. Each product results from a unique production

process and characterizes by special technology: the process it obtains and the kind of material it makes.

Products are all those objects or artifacts produced in industries, companies that follow the production line, or people's artistic way. Products can vary according to the proper life cycle. Some products have extended use, such as computers, books, or vehicles, but some products ship quickly, such as food, personal items, and medications.

Service is also a product, but not a material one, such as, for example, an internet connection, access to TV channels, hotel services, or social security, among others. Products are distinguished to be tangible or intangible.

Product means a consequence, effect, or result of a specific situation, circumstance, or action given to people. The durability of a product varies depending on its quality.

3.2. Craft and art

From the Renaissance onwards, there was a separation between arts and crafts in classic art. The difference between the two is that works of art are usually unique works attributed to the author's genius. On the other hand, the craft responds to the repetition of the traditional model, either by manual or industrial processes, because it is serial in each case.

Today, aesthetic sensibility is secondary and meaningless in most of society. The present is such that before a work of art, a worldly man, restrained by his blindness, will not notice the beauty expressed in the work, nor the message contained in it, but its market value or the name and reputation of the author.

A well-known anecdote about Picasso said in front of a picture of a beginner: "This picture lacks something else to be good." "What, master, what does it lack?" The beginner asked. "My signature is missing to be a great woHowever of art," Picasso replied. However, the artist is not a signature. A work of art in itself should be able to touch a person. It needs to have its own life to separate itself from its creator. (Goodman 2002, 58).

The work of art was not born for its author's glory, but the artist's prize consisted of his transformation through artistic creation. It transcended the artist because he embodied something that was outside of him. He could glimpse it and give shape to it in the sensory world.

There is no universal definition of art, but there is a consensus that art is the conscious creation of something beautiful or meaningful using skill and imagination. Art is subjective, and the definition of art has changed throughout history and in different cultures. Jean Basquiat's Painting, which sold for $ 110.5 million at Sotheby's auction in May 2017, would undoubtedly need help finding an audience in Renaissance Italy. Formal quality became particularly important as art became more abstract in the 20th century. The principles of art and design — balance, rhythm, harmony, and unity — were used to define and evaluate art.

Over the centuries in Western culture, from the 11th century until the end of the 17th century, art was anything done with skill as a result of knowledge and practice. Artists learned their craft, learning to replicate their subjects skillfully. The performance occurred during the Dutch Golden Age when artists could paint in various genres and make a living from their art in the robust economic and cultural atmosphere of the 17th-century Netherlands.

During the Romantic period of the 18th century, as a reaction to enlightenment and its emphasis on science, empirical proof, and rational thought, art began to be described as something done with skill and created in search of beauty and expressed artistic feelings. Nature glorifies, and spirituality and free expression celebrate. Artists themselves achieved a level of fame and were often guests of the aristocracy (Jašarević 2016, 141).

On the other hand, generating new ideas is also an art that only gets to some. Now creative ideas cost a lot of money and can bring popularity. Furthermore, if the idea is excellent, there will always be people who can implement it effectively. In the beginning, there were several types of art: painting, sculpture, architecture, fiction, singing, dancing,

music, and theater, but now there are many more. Photography, cinema, modeling, the advertising industry, show business, parkour - all this and much more- can be called modern art. Art reflects the mood that prevails in society, tastes, and habits.(Oršolić 2006, 204) That is why watching how creativity trends change over time is always interesting.

4. Market

4.1 Art as a Product

Art is the opposite of production. The product has more standards with research and development. When art becomes a manufactured product, it becomes a craft. It is the premise of this paper. Part of the creative industry creates an art product or, in some way, art. The question is how much we want to make art industrial and how much we want to make an art factory. Today there is almost no difference between a factory of works of art, a factory of shoes, a factory of dresses, or a factory of wall paintings, and between an artistic project and artistic things created here from art, from actual art.

Treating culture and art as a product has led to a distorted understanding of the purpose of public funds invested in culture and misunderstandings about the purpose of that investment. Culture becomes an investment that must pay off, affecting how culture manages (Rocco 2017, 87). There need to be criteria for evaluating culture and the quality of cultural events. They cannot be quantitative and only reflect the number of tickets sold or programs produced. In the art of a product, value is in the result, not in its production experience.

Product-oriented art does not stimulate playful creativity. Instead, art products are structured and focused activities that aim to produce a specific outcome. Art is a process or product of intentionally assembling elements to attract the senses or emotions. Art encompasses various human activities, creations, and methods of expression, including music, literature, film, sculpture, and painting. When we have a product, we use specialized knowledge and skills.

When the art industry comes on the market, there is only one type of relationship with a non-artist. A relationship with people is just a relationship between selling and buying (Infini Grupa 2023). Products are not based on selling and buying a ticket but on the fact that the artist and the people are all together and creating something in between. Such a relationship makes things complicated. We are still determining if we want to go this industrial route.

An original work of art is certainly not a service, like a plumber or a roofer, but it is free to work. The artist wants to avoid creating goods like manufactured goods (Huzjak 2011, 86-97). Although the artist does not think about his works using the word product, the result is for sale. Therefore the work of art is a product. Ultimately, the work wants to bring into other people's hands; Handmade pieces they sell by producing a product. Most people who consider themselves artists like to think that their work has some "higher goal." However, it is a product if trying iso sell it (Dubrovnik Festival 2023). People place art in the world of representation in the context of the advertising industry.

4.2. The Price of ART

Deutsche Bank's collection includes over 50,000 works of art exhibited in the bank's offices and foyers. Among them are originals that many collectors would like to have in their collections. Deutsche Bank was among the first companies to exhibit works of contemporary art in the workplace as early as 1979 (Lambeck, 2008).

The results of contemporary art are displayed in the offices and hallways of the bank's buildings to help employees face aesthetic issues. This collection has been celebrated since it was exhibited in 1984 in the twin skyscrapers of that bank in Frankfurt. Then each floor was named after one artist or artist.

5. Analysis

Different views and understandings of art explain that real art is not a product. The work of art is of inestimable value, and by giving it the price of sale, we classify it in the category of goods for sale. Everything sold belongs to the variety of economy, marketing, and work is understood as a product or service. Today, many academic painters work to order. Such negotiations constrain the contractor's work, often with limited freedom, as clients determine the format, color, and theme and negotiate the price. Instead, many artists became employers, earning money through tickets, various shows, or the sale of works.

The high, intriguing, inspiring need to create and describe the experiences of the outer or inner world, visions, and messages cannot be ordered. In the way explained, the best, deeply intense, unlimited free works are created during inspiration, just what art should be.

6. Conclusion

The history of human existence in specific periods is characterized by art adapted to the social order and time. The famous handprint of the prehistoric person is the first scene of leaving a trace, a message. Throughout all stylistic periods, art is defined in an adapted way. While many musicians, painters, and other authors worked under the patronage of rulers, their works are now recognized as representative of the art of their respective periods. Whether the author's signature can increase the work's artistic value is questionable. Economics, marketing, and the market can set a price for any product, including artwork. If creativity is purely commercially motivated, it is classified as a sales value, that is–a product. Every work should be approached critically.

Real art is beyond monetary value. It is a part of someone's life and the world and was not created to please the audience but rather to spread the creator's message about the spirit of the times, problems, provocation, and injustice. The true purpose of art transcends its monetary value, resonating with the deeper essence of humanity.

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The Contemporary Trends in Advertising Services Global Market

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ABSTRACT. One of the powerful driving forces in any business is advertising. Business internationalization contributes to the constitution of the global market of advertising services that also is digitalized. In this article, the authors aim to uncover and explore the contemporary trends in the global market of advertising services, under globalization and digitalization socio-economic megatrends. *Methodology and Results*: Leaned upon the evolutionary approach to the global market of advertising services, and the analysis of relevant statistical data, the authors have systematized the main trends observed in global advertising services market and provided explanations for these trends. They also have identified and analyzed the particular directions within these general trends. Furthermore, the authors have paid attention to the shifts in global market of advertising services produced by the COVID-19 pandemic crisis and offered recommendations which, alongside the outcomes of the article, may help businesses to develop their strategies in line with the revealed and systematized trends and particular directions in order to become more competitive at the contemporary global market of advertising services. In this context a concept of performance advertising has been introduced.

KEYWORDS: Contemporary Trend, Global Market, Advertising Service, Performance Advertising
JEL Classification: F0, M3

1. Introduction

The success of any business much depends on its promotion, including through advertising channels. The processes of economic liberalization, which have now covered nearly all countries of the world, have contributed to the fact that these countries are rapidly integrating into the world economy and, therefore, into the world market of advertising services. This fact, in turn, contributes to the constitution of the world economy and its markets as global. Besides, the application of informational and telecommunication technologies contribute to the development of the world market of advertising services as the global one but in a virtual dimension, adding it to the traditional physical dimension. Therefore, in order to remain competitive, contemporary economic agents should follow the trends in the global market of advertising services.

The purpose of this article is to highlight and explore the trends on the world market of advertising services, the latter being in globalization (Rotaru 2014, 532-541) and digitalization, to help increasing business competitiveness. The global advertising market is a sphere of international advertising activity associated with systematic sales and purchases of advertising services, organizationally based on global networks of advertising agencies. The global advertising market emerged and is currently developing in the process of deepening and expanding the process of economic integration, the activities of transnational and international companies, and the evolution of the world economy and international trade as the global ones. Today we can state that this market is huge - in 2021, the world's advertising expenditure was 705 billion US dollars, which is about 0.77% of the world GDP (Zenith 2021, 1).

Methodology and results. Our analysis of statistical data from world reports relevant to the present research, as well as the international investigations in the given field allowed the

application of the evolutionary approach to the global advertising services market. As a result, we can sustain that there are many trends that determine the contemporary development of the world advertising services market. Grouping them together, we can distinguish the following six basic current trends:

1. Continued globalization of the world advertising market, its further expansion and global consolidation.

2. Growth of volume of international advertising market (increasing investment in advertising).

3. The process of concentration of revenues and market share.

4. Changing channels and means of delivering advertising to consumers.

5. Shifts in the global advertising services market caused by the COVID-19 pandemic.

6. The trend of reducing the overall effectiveness of advertising.

The process of exploring the highlighted trends allows us to identify the particular directions within each of these major trends.

2. Continued Globalization of the World Advertising Market, its Further Expansion and Global Consolidation

The modern advertising market is an integral part of the world economy, to the formation of which transnational companies make the most significant contribution. They work in the advertising market on a global scale, contributing to the accelerated development of the global mass media and the global exchange of information (Nikonova *et al*. 59).

The increasing globalization of industries such as consumer goods and automobiles makes advertisers to change their creative and spending strategies to reach buyers in countries with growing disposable incomes. The transnational companies develop clear, simple and consistent marketing messages that are applicable to different cultures. The experts point out the global nature of the advertising market - all regions of the world economy contribute to the global advertising spending. The largest share is that of North America (42%), the Asia-Pacific region (29.6%), and Western Europe (17.4%) (Zenith 2021, 6).

At the same time, the globalization of advertising services requires multinational companies to study more deeply the cultural differences and peculiarities, including the linguistic ones, of their target (local) markets. Thus, for example, as researchers from the Stern School noted, the advertising campaign under the name "Got Milk?" of the American Dairy Association, having been very successful in the US, did not work in Mexico because the phrase that was the basis of their promotional axis, when translated into Spanish, appeared as "Are You Lactating?" (Hirsh 2022), acquiring an offensive connotation. Quite often, the humorous advertising campaigns might work in one country, while not fitting into a cultural environment in another country. In this context, it is worth mentioning that not only verbal messages, but also non-verbal ones should obviously be treated with a certain precautions, for example, the use of some symbols and colors. Thus, many tropical countries associate the color green with danger, which is not the case in the US or European countries. The red color is associated with weddings and happiness in China (Hirsh 2022), India, and some Asian countries but may have a different perception in the European region.

The subsequent analysis leads us to highlight two opposite directions in the evolution of advertising services under the impact of globalization. *The first* refers to the need to develop clear, simple, uniform advertising messages with culturally neutral content that can be understood identically in any local market. *The second* direction forms itself under more in-depth localization of marketing strategies. The latter results in maximum adaptation of both products and advertising messages to the native culture of the targeted consumers. The

transnational companies, which have developed successful global brands, can show us examples of the successful combination of both directions in their advertising messages, increasing their completeness on the global market. Thus, *McDonald's* corporation, on the one hand, has launched clear, simple and coherent messages on the global advertising market, which relate to different cultures in a uniform way. On the other hand, it has revised its product lines "to feature healthier items and others geared to local markets -- such as wine in France and sushi in Asian countries" (Hirsh 2022). It also demonstrates through its advertising messages loyalty to the cultures of target markets by using ingredients specific to those cultures, for example, avoiding pork in the market of Arab countries and beef in the Indian market.

However, increased access to cable and satellite television, as well as broadband Internet, are also establishing global links between nations and common expectations of their consumers. This has worked particularly to the advantage of airlines, apparel manufacturers and other advertisers targeting a global audience. This allows us to continue the logic of the first direction within the globalization of the world advertising market mentioned above, by arguing that effective advertising through clear, simple, culturally neutral and standardized messages result in their effective perception, and can create new demand in new markets, influencing changes in habits and lifestyles of purchase at the local markets. In doing so, the overseas teenagers and young adults have turned American brands like *Levi's, Nike, McDonald's* and *Marlboro* into global brands (Hirsh 2022).

Another trend, which has its echo in history, is to capitalize on events of global significance such as the Olympic Games to boost the companies' brands with an international audience. The bright examples here is the electronics manufacturer *LG* when the games were held in South Korea and wireless carrier *China Mobile* when the event was held in Beijing (Hirsh 2022).

3. Growth of Volume of International Advertising Market (Increasing Investment in Advertising)

According to global advertising agency *Zenith*, in 2010, global advertising spending was approximately 393 billion US dollars. In 2021, the figure increased to 688 billion US dollars (Zenith 2021, 8). Thus, the increase was 175%! Prognosis is that by the end of the 2020s, the figure will exceed 1 trillion US dollars (Grous 2022).

This trend can be explained by the fact, on the one hand, of the globalization of the international market of advertising services, on the other hand, by its digitalization. Thus, global digital expenditures showed explosive growth dynamics, starting with the year 2000, and demonstrate a constant increase, along with global traditional advertising expenditures, towards the year 2030 (Grous 2022).

4. The Process of Concentration of Revenues and Market Share

Currently, the global advertising market is dominated by a number of transnational corporations that have collected the most considerable part of the advertising business, which allows them to control a significant share of the global advertising market (Nikonova *et al*, 59). Table 1 shows the ten largest advertising agencies, by revenue, which are particularly sizable in the global advertising services market.

Table 1. The world's 10 largest advertising agencies by revenue in 2021

Advertising agency	Headquarter	Revenue, billion US dollars
WPP	London	17.6
Omnicom Group	New York	14.3
Publicis Groupe	Paris	13.9
Accenture's Accenture Interactive (now - Accenture Song)	New York	12.5
The Interpublic Group of Companies	New York	10.2
Dentsu Group Inc	Tokyo	9.9
PwC's PwC Digital Services	New York	8.9
Deloitte's Deloitte Digital	New York	8.7
Hakuhodo DY Holdings	Tokyo	7.5
IBM Corp.'s IBM iX	New York	6.4

Source: adapted by the authors based on Statista (2022)

The process of income concentration in hands of the small group of international companies could be explained, first, by the fact that these companies are able to capitalize on both directions within globalization, considered by us above. They develop global, transnational and local messages appropriate, on the one hand, to consumers of advertising services from the global market, on the other hand, to those from local markets. In the research (Siscan 2021) global, local and transnational approaches to marketing communications are discussed in the light of neuromarketing, highly used by the leading advertising companies. Secondly, the process of income concentration in the global advertising services market may also be explained by the fact that the leading companies succeed to capitalize thanks to digitization of their international business. Thus, the analysis of the distribution of revenues and the market share from digital advertising during the years 2016-2023, so including forecasts, based on the data of the company eMarketer, shows us the concentration of global revenues from e-advertising at five leading companies, such as *Google* (31.5%), *Facebook* (14.3%), Alibaba (6.2%), *Tencent* (1.9%) and *Amazon* (0.8%), in 2016 (Cramer-Flood 2021). Summing it up, we can notice that in the reference year the global market share of digital advertising services belonging to those five companies was 54.7%. Further study and calculations lead us to the conclusion that the total share of the revenues of the targeted companies is in increase, intensifying the trend of concentration of revenues and global market share. Thus, in 2020, the share of total revenues obtained by *Google* (27.5%), *Facebook* (22.3%), *Alibaba* (8.6%), *Tencent* (2.9%) and *Amazon* (5.2%) constituted already 66.5% of the total global digital advertising spend. Estimates for the year 2023 show us the market share of *Google* 27.5%, *Meta Platforms* (formerly Facebook) – 25.2%, *Alibaba* – 9.5%, *Tencent* - 3.1% and *Amazon* - 7.1% (Cramer-Flood 2021). Thus, the simple calculation shows that the cumulative global digital advertising services market share of these five companies will increase to 72.4% by the year 2023.

5. Changing Channels and Means of Delivering Advertising to Consumers

The analysis of the global market of advertising services through the lens of channels and means of delivery of advertising to consumers shows us that there is a redistribution of expenses in the direction of digital advertising. Logambal has argued in his research, dedicated to emerging trends in advertising, that a paradigm shift took place last decades. It conditioned the change of channels, means and modes of advertising. "There were days when producers and manufacturers depended only on radios, newspapers, and pamphlets to advertise their products

it was only until the late nineties when digital media crawled in and in early 2000 seen it spread its wings" (Logambal 2016, 22).

The analysis of statistical data, provided by the company *Raconteur Media* (Raconteur Media 2021) through the optics of the evolution of expenses for advertising channels on the global market, allows us to highlight the following trends. Spending on newspaper advertising was increasing until 2007, spending on magazine advertising saw growth until 2008, and spending on TV advertising saw growth until 2014. Spending on search advertising began to rise suddenly in the early 2000s, and spending on social media and online cinema advertising began to increase from the year 2010.

The comparative analysis of the data for the years 2010 and 2021, provided by the advertising agency *Zenith* (Zenith 2021), allows us to draw the following conclusions. In 2010, television was a priority channel for ad spending, accounting for 48.1 billion US dollars, which constituted, according to our calculations, 37.7% of total ad spending in the global market. Newspapers took the second position in the ranking, with a share of 20.9%, but online advertising services were only in the 3rd place, constituting 16.8% of total expenses (see table 2). However, the data from 2021 show us that the situation has changed radically. Spending on online advertising services has already reached 405.3 billion US dollars, which constituted 58.9% of the total spending on advertising channels in the global market. The expenses for television knew the second position in the ranking, having the weight of only 24.8% in the total expenses. The placement of advertising in newspapers has already reached the 4th place (4.3%), letting the third position to the street advertising channel with a share of 5% of the respective total expenses**.** According to estimates made by the leading company in global media investments *GroupM*, in its report edition of June 2022, digital advertising will reach 73% of the global industry's revenues (GroupM 2022).

Table 2. The evolution of advertising channels through the prism of expenses

Advertising channels	2010			2021		
	Expenditure, billion US dollars	Share of total expense %	Ranking	Expenditure, billion US dollars	Share of total expense%	Ranking
Newspapers	82,2	20,9	2	29,7	4,3	4
Magazines	38,1	9,7	4	17,5	2,5	6
Radio	28,6	7,3	5	27,9	4	5
Television	148,1	37,7	1	171	24,8	2
Cinema	2,1	0,5	7	2,3	0,3	7
Outdoor	27,5	7	6	34,3	5	3
Online	66,2	16,8	3	405,3	58,9	1

Source: Adapted and calculated by the authors based on data from Zenith (2021)

As the particular directions within the considered trend of the changing investment priorities in advertising channels in favour to the online advertising, we can notice, first, that the share of social networks increased in the total spending for Internet advertising from 2.06 billion US dollars in 2010 to 148.8 billion US dollars in 2021 (Zenith 2021, 8). Secondly, online advertising is absolutely dominated by mobile ad spend, not "desktop advertising", although 10 years ago it was the other way around. Thus, in 2010, desktop advertising constituted 65.746 billion US dollars, but mobile advertising registered only 501 million US dollars. Starting with 2017, in which spending on mobile advertising for the first time surpassed spending on desktop advertising, already constituting 127.4 billion compared to 89.7 billion US dollars and establishing itself as a trend. In 2021, spending on mobile advertising was 287.9 billion, but for desktop advertising - 117.4 billion US dollars in current prices (ibid.).

6. Shifts in the Global Advertising Services Market Caused by the Covid-19 Pandemic

The change in the global advertising services market that took place due to the COVID-19 pandemic could be expressed through a grouping of several particular trends here. *The first one* relates to the fact that the pandemic has completely disrupted consumer behavior. For many consumers, who preferred to buy goods in a physical reality, the need for online shopping appeared (Zenith 2021, 1). According to a study conducted by the international research company *Kantar Millward Brown*, during self-isolation, people began to spend 63% more time behind the screens of personal computers and smartphones (Mikriukov *et al*. 2021, 147). As a result, companies have continued their increased investment in the digital transformation of its advertising. Several brands have started to adapt their advertising campaigns to the current situation and modify their promotional message. This constituted *the second particular trend*. For example, *KFC* released an ad in 2019 in which people licked their fingers after eating chicken. The company received 163 complaints from UK residents. People called it irresponsible and said it could spread COVID-19, so *KFC* representatives suspended such promotional messages. Confectionery brand *Hershey* ran an advertising centered on hugs and handshakes. Later, the company replaced its video with product image frames, accompanied by voice acting and text. This is how the brand representatives reacted to the corona virus outbreak and WHO recommendations to reduce contact with others. *Burger King* created two videos about the increased hygiene requirements at its units (Nasonova 2020, 106-107).

Having analysed the situation through the lens of spending on advertising services, based on data from the *Zenith* agency, we can notice that these spending, in current prices, decreased in 2020 compared to 2019 by 3.8%, but registered an unprecedented increase in 2021 by 15.6 %, (Zenith 2021*,* 9), first of all, thanks to electronic advertising.

During the pandemic, the advertising budget planning strategy changed. According to a survey conducted by the agency *PRT Edelman Affiliate*, among marketing directors and media directors of large international companies, about 40% of respondents said that they had done budget planning ad hoc, and 30% switched to monthly planning. Almost 60% of respondents reported that they stopped outdoor advertising during the pandemic, 38.5% reduced spending on BTL, 34% on traditional TV, 25% on commercial marketing and 22% on radio advertising. Among the priority digital channels for promotion, advertisers identified social media marketing (66%), contextual advertising (53%), blogger activations (44%), advertising banners (37%), and digital PR (31%) (Chervonsky 2020).

International experts in the field of advertising services emphasize the growing role of social networks in the promotion of global products and services. According to the online survey, organized by the researchers Mikriucov V. and Axenova A., 56.5% of respondents reported that they began to spend more time on social networks and the Internet during the pandemic (Mikriukov *et al.,* 148). Business people, who actively capitalized on the different forms and new technologies in digital advertising, caught the trend. In doing so, the special attention they pay to gamification of the content of promotional messages, the development of AR technologies, CTV advertising, and active collaboration with opinion leaders (influencers).

Proceeding from the fact that maintaining consumer attention both in the sense of time and under high pressure of global competition is an actual issue for business people, creativity comes to the foreground. Alongside with the new technologies, advertisers have also used the corona virus theme for advertising purposes, updating it to the needs of the audience. Thus, the advertising and communications company *BBDO* developed in the early days of the pandemic a series of videos for its clients to educate the Internet audience about the corona virus, as well as showing what measures they should take to protect themselves against the virus. By doing so, the company supported the current trend and demonstrated care towards the consumer, which did not go unnoticed (Mikriukov *et al.* 149).

7. The Trend of Reducing the Overall Effectiveness of Advertising

This trend manifests itself in two ways. On the one hand, young people are less inclined to use mass media such as TV, newspapers, magazines, radio, which dominated the market in the last century. According to experts from the Hong Kong financial company *Velotrade*, "more young consumers are indifferent to traditional media" (Velotrade 2023). Obviously, the effectiveness of advertising companies using this kind of media certainly goes down with a decrease in their coverage.

The youth of today, especially Generation Z, born between 1997 and 2012, use the Internet as the main source of information. Older generations are trying to keep up. Consequently, the places where a typical contemporary consumer, especially among young people, spends a decent part of their day are news sites, blogs, video hosting, and social networks. Marketers are well aware of this shift what is reflected by the fact that online advertising spend increased 6 times in the decade between 2010 and 2021 (See Table 2).

However, in this area, not everything is as smooth as it seems at first glance. Currently, the Internet information space is really oversaturated. Against this background, the visibility and impact of advertising on people are falling. Researchers at *eMarketer,* a market research company, stated in concern: "Most consumers now proactively avoid advertising, whether by using ad blockers, paying for ad-free digital media experiences, or skipping ads" (Insider Intelligence & eMarketer, 2021). Statistics based on user surveys really paint a disappointing picture. According to the social media marketing and management platform *Hootsuite* report, an average of 37% of respondents from 47 countries used ad blockers, in particular in China - 47%, in Germany - 38.9%, Russia - 38.7%, Sweden - 37.6 %, France - 36.2%, Romania - 34.7%, USA - 34.2%, UK - 32%, Japan - 19.9% (Digital 2022, 271).

Our analysis of the age and sex composition of users who use ad blockers shows that most of them are among men aged 16-24 years (39.4% on average across countries) and 25-34 years old (43.2%), in contrast to men aged 55-64 (34.3%) (Digital 2022, 272). That is, some of the most economically active segments of the population neglect Internet advertising.

The reasons why the surveyed users ignore advertising are as follows: "there are too many ads" - 62.1%, "ads get in the way" - 55.3%, "ads aren't relevant to me" - 40.8% (Digital 2022, 273). Another research in this context even increases the picture. Thus, according to the Digital consumer research report created by the Customer Collaboration Platform *Bulbshare,* 74% of consumers feel bombarded with ads, 63% of Generation Z use ad blockers to avoid online adverts. As the experts sustain, "they feel overwhelmed by the number of adverts they see daily". More than that, advertising fatigue and disillusionment has gone so far that 84% of those born between 1997 and 2012 have lost faith in influencers - TV stars, TikTok, Youtube, Twitter, Instagram, Facebook, who usually have a large and loyal audience (Marketing Beat 2022).

The contemporary marketers are eager to find the solutions to make the advertising services more effective. In this context, one of the studies conducted in the USA, has reflected some suggestions given by the respondents as follows. When asked what improvements would make them pay more attention to online ads, American respondents, especially Millennials (ages 18-34), recommended to make the ad funny (40%), to make it entertaining (32%), to add stunning graphics (19%), to feature a sexy man or woman in advertising (10%). Besides, the Millennials said they would pay attention to online ads if they were interactive, preferred it more if compared with any other age group (21% vs. 9% of those ages 35+) (MediaPost 2014).

Conclusion

Advertising is the driving force of any business. The deep internationalization of economic affairs, on the one hand, and the scientific-technologic progress with its ICTs, on the other hand, contribute to the development of the world market of advertising services as global and

digitalized. This fact, in its own turn, calls forth numbers of trends on the global advertising market that can be grouped in six trends as follows: continued globalization of the world advertising market; increasing investment in advertising; concentration of revenues and market share; changing channels and means of delivering advertising to consumers, shifts in the global advertising services market caused by the COVID-19 pandemic (Rotaru 2020, 71-82) and reducing the overall effectiveness of advertising.

Each trend contains some particular directions. The list is not completed, but proceeding from the preliminary research outcomes, there may be drawn some recommendations for increasing competitiveness of economic agents in the contemporary global environment. Globalization of the world market for advertising services makes it especially significant for the advertisers to find its niche, to maintain it under the high intensive global completion, to target as precise as possible its target audience worldwide, to assess correct the communication and promotion channels, including from the cross-cultural perspective, to allocate a budget reported in percentage correct and sufficient for promotion, to switch to the new channels based on the new technologies, to learn new methods in digital advertising, and to make the advertising even more creative, interactive and entertaining. Communicating messages to the target audience is as effective as the dissemination and communication channel is properly selected. Each category of consumer, depending on the criteria according to which it has been established, is receptive only to certain communication channels, i.e. (Petcu 2013, 4) their correct assessment means that the message reaches the consumer directly, thereby increasing the chances that the consumer will react favorably and achieve the act of purchase.

One more recommendation to add is as follows. The advertising may become much more effective if the contemporary postmodern megatrend is further exploited in the sense of organizing the advertising in the form of *performance,* and in case of global market – *digital performance.* This means that a potential consumer is involved in a particular situation or a series of situations designed by marketers, or even together with the consumers, and by their participation in a certain action a product or a service is being advertised. Unlike the involvement of the superstars, famous bloggers and other influencers, *performance advertising* deals with the ordinary consumers. It is based on the desire of each person to become "an influencer." Additionally, this approach will meet the requirements of the contemporary consumers from both considerable categories – Generation Z and the Millennials– to make the advertising more creative, interactive and entertaining.

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Heterodox Science Leadership

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ABSTRACT: Heterodox science challenges orthodox science. Unorthodox science approaches are heterodox if they apply more unconventional, pluralistic views and methods than the leading orthodox tradition. Heterodox science has been practiced ever since science exists. Heterodox scientists have been fundamental drivers of change through pluralistic innovations in many different fields, such as astronomy, physics, economics as well as behavioral sciences, to name a few. Heterodox science can stem from methodological pluralism in acknowledging and applying different methods than conventional science. Heterodox science can also be a reality check in questioning the validity of prevailing results and state-of-the-art methods. The internal validity gets backtested by replication, which has led to scientific advancements in many fields, most recently notable in the widely discussed replication crisis in behavioral economics. The external validity gets evaluated in a reality check of stylized artificial models for applicability to real-world contexts. For instance, historically external validity tests opened the gates for groundbreaking advancements in physics, macroeconomics as well as behavioral insights. In all these accomplishments of heterodox science approaches though, it is also to note that not all heterodox scientists are successful and sometimes they are doomed to be left on the periphery of discussion and not become influential parts of vibrant communities. This paper addresses the question of why heterodox scientists are sometimes successful in breaking new trends and sometimes they are left in the periphery of scientific discourse and do not claim a leadership role. The paper argues that obstacles for heterodox scientists arise if they engage in the following behavior: (1) an obsessive focus on the critique, which can detach socially; (2) an obsessive focus on discrimination of excellence in trying to bring down those who are in power dominating fields and thereby being distracted from contributing to science in better ways of doing research or providing new results; as well as in (3) colleague amnesia and motivated forgetting of citing colleagues, which harms networking advantages and creates silos of knowledge and self-reinforcing echo-chambers in inefficiently one-dimensional school-thinking. The paper closes by providing recommendations for heterodox scientists, who aspire to become leaders-in-the-field, in pointing at positive critique mechanisms in only commenting on research if being able to show a way how to do it better. Science diplomacy can help educate upcoming researchers to offer critique constructively and in a tactful way. Embracing excellence in honest acknowledgment of colleagues' accomplishments and whole-hearted efforts to see others' points of view as well as collaboration attempts with leading scholars are additional strategies to break through with heterodox thoughts without discriminating against excellence. Science advancements to improve the gap between the orthodox and heterodox world include heterodox science ethics and science diplomacy solutions. Open discussions and democratization of knowledge creation can complement the few key journals per field through additional online outlets with international and pluralistic outlooks. Incentivizing collaborations that bridge the divide between orthodox and heterodox scientists is another institutionally-implementable strategy to foster scientific advancement through heterodox ideas. Raising awareness for the concept of colleague amnesia as the motivated forgetting of colleagues' work appears as a favorable institutional move and proactive community standard that can make science a better, more inclusively innovative world.

KEYWORDS: Advancement of Science, Collaboration, Colleague Amnesia, Cooperation, Discrimination of Excellence, Economics, Ethics, Heterodox Leadership, Heterodox Science Ethics, Interdisciplinary Research, Motivated Forgetting, Leadership, Orthodox Science, Pluralism, Science, Science Diplomacy

Introduction

Heterodox sciences challenge the status quo of orthodox research methods and findings. Many historical examples exist in which unconventional ways of approaching conventional research tested the prevailing body of knowledge and led to surprising and most innovative advancements. New ways of conducting research and pluralistic openness incepted entire new fields thanks to

heterodox science approaches. Methodological heterodoxy, reality checks of stylized models and backtesting of given results are three major gateways of how heterodox scientists advance research on a constant basis.

In the historical long tradition of heterodox pluralistic science conduct, it is striking that hardly any source addresses leadership. In the study of heterodox approaches and pluralistic method cases, it becomes apparent that heterodox sciences are risky endeavors with unknown outcomes that tend to polarize. Why is it that some heterodox scientists are successful in creating new ways of thinking and doing to leverage into leaders in the field? And why do some heterodox attempts get stuck on the periphery of scientific advancement and pass without the community noticing them despite a valid point made? In this polarization, what are the key ingredients of successful science transformation that sprung out of heterodox science camps?

This paper starts with providing some of the glorious moments heterodox science has celebrated in the long history of knowledge creation but also addresses potential challenges unconventional approaches face. Major hallmarks of heterodox science victories include the acknowledgment of the earth being round and circulating around the sun. The beginning of nuclear quantum physics. The finding of economic business cycles. And the beginning of behavioral sciences. At the same time, the respective heterodox scientists were oftentimes only credited with their genius talent after considerable time had passed or not at all. This article therefore attempts to also pay attention to why some heterodox scientists have faced problems to inform the community about their unconventional insights and offer suggestions on how to speed the process of innovation transfer in society.

This paper also takes a first stab at mentioning the need for heterodox science ethics and suggests science diplomacy as a way to lead others to follow heterodox science approaches. Obsessive focus on critique, emotional collaterals of discrimination of excellence in the negative suppression of leadership around but also colleague amnesia in the motivated forgetting of citing colleagues' work deliberately are some of the detected areas of improvement for flourishing heterodox sciences (Puaschunder, 2023).

The future success of heterodox science may lie in promoting open discussions and a democratization of knowledge creation in questioning the monopoly hegemony of some 'key journal' outlets and offering additional knowledge transfer means. Positive critique training that helps to comment on mistakes and omissions only if showing a way how to do it better or simply doing it better in one's own research are other suggested recommendations to promote heterodox leadership based on productive research ethics and positive reinforcement forces. Embracing excellence around oneself in collaboration with the leadership appears as an additional institutional change mechanism to help foster heterodox sciences. Colleague amnesia may be classified as a subform of soft plagiarism in order to raise awareness for intellectual schools' deliberate neglect of acknowledgment of others' accomplishments (Puaschunder 2023). Databases could also help proper acknowledgment mechanisms through transparency of research results. Lastly, double-blind review procedures enhanced with feedback and response mechanisms may also help in averting colleagues' unfair discreditation. All these endeavors may aid in constructively advancing science, pluralistically enriching research output as well as shining a positive light on unsung hero heterodox leaders.

This paper is structured as follows: First, heterodox science approaches will be discussed in historic examples. Different categories of heterodox science approaches will be classified as unconventional science approaches by embracing pluralistic viewpoints and methodological advancements; questioning the external validity of stylized models as well as backtesting in replication studies. The observation is presented that some heterodox attempts are highly successful, while others fail to make the case for change and end up not being noticed at all. Then heterodox science leadership will be called for in providing some of the speculative determinants and reasons for success to transform and innovate research or incept completely new fields or state-of-the-art *modi operandi*. On the individual level, the right way

to present critique but also the acknowledgment of leadership around and fair citation strategies may help heterodox approaches get traction. Institutional approaches to foster a pluralistic environment for education and publications could feature career incentives and specific pluralistic trainings but also ethics development to cite conscientiously and science diplomacy appreciation by the community could help. The discussion of this paper calls for future qualitative and quantitative research on success factors of interdisciplinary research as well as transparency in working on an open science catalog of positive examples of how heterodox sciences have advanced academia to motivate future heterodox science leaders and contemporary pluralistic students.

Heterodox Science

Heterodox science is as old as science itself. Heterodox views are those that contest and complement the orthodox schools. Historical examples are found in Eratosthenes of Cyrene, who proved with mathematical geography the earth to be spherical around 194 BC (Rawlins 1982). Another classic heterodox scientist is Galileo Galilei who propagated the Copernican heliocentrism with the earth rotating around the sun as early as 1615 (Finocchiaro 1989; Hannam 2009; Sharratt 1994). The first account of economic cyclical waves was measured by the Russian Nikolai Kondratiev, who was imprisoned for presenting his work and later executed under Stalin (Buyst 2006; Barnett 1998; Kondratiev 1925/1984; Mager 1987). Hyman Minsky (1974) accounts for another proponent of economic wave theories, who is believed to not have been given enough coverage and credit for his understanding of the economy as a recurrent pattern wave-driven (Bernard, Gevorkyan, Palley & Semmler 2014).

While some scientists are winning debates on intellectual grounds, many heterodox scientists, however, remain on the periphery of discourse all their lives as unsung heroes cast out from influential circles that dominate the prevailing scientific spearhead. An example of intellectually winning a discourse but not changing a field is the Cambridge capital controversy of the 1950s and 1960s, in which UK Cambridge attacked the dominant writings on the macroeconomic concept of 'capital' of the US Cambridge group. While the critique appears intellectually valid, the discourse remained more vibrant and centered around the US Cambridge group as for bringing out more novel extensions and advancements than rather been focused on the critique of other people's work.

On the other hand, history also has an amplitude of successful heterodox scientists, who changed fields successfully and lastingly. For instance, the systemic collection of human tissue of the deceased, which was at that time forbidden, became the driving inspiration for Leonardo da Vinci's human form capture in his art, which inspired the Renaissance and elevated realism in the fine arts. Albert Einstein working as a patent office clerk at the Swiss Patent Office became the spring feather for this genius' rebellion against macro-physics in incepting an entirely new field of modern quantum theory in physics. Joseph Schumpeter was inspired by Karl Marx's critique of capitalism in his observation of driving forces between capitalists and working-class living conditions. Yet putting a positive spin on the 'creative entrepreneur' – who needs to constantly innovate to maintain a competitive edge against competitors, which was found as the ultimate driver of productivity of nations – leveraged Joseph Schumpeter as one of the most successful professors of his time (Stanford University Press/Schumpeter 2011).

Law and Economics also originated as a heterodox movement that transformed into an orthodox field. Early Law and Economics scholars started by adding to the prevailing model of legal analysis that focused on ex-post outcomes an innovative analysis of ex-ante incentives created by legal rules. Early Law and Economics scholars' constructive – and sometimes provocative – output helped establish Law and Economics as a vibrant field of mainstream legal scholarship in the US today (Garoupa & Ulen 2022; Gelter & Grechenig 2014). Behavioral economics is another success story of heterodox scientists thinking beyond disciplinary borders.

The psychologists Daniel Kahneman and Amos Tversky started using laboratory experiments to test neoclassical utility and efficiency assumptions and found human beings deviating from rationality (Kahneman 2002).

Many of previously considered heterodox scientists advanced over the course of their productive lives from the periphery into leaders in the field. John Maynard Keynes, Lawrence Summers, Joseph Stiglitz, Michael Porter, Richard Thaler and David Laibson are examples of contemporary scholars who started out heterodox to then become some of the most prolific leaders in their own fields, which they created. These scholars were rather focused on their own way of thinking and capturing their ideas in eccentric approaches than being consumed by the status quo and spoiling their own creativity by studying and reiterating what others have done or known before.

Why are some heterodox scientists doomed to prevail in the periphery and others successful in incepting a new field? What are the success ingredients of heterodox science leadership? And what institutional support can be granted to scientists to make their unconventional ideas flourish? This article tries to address these unsolved questions. Asking what key ingredients predestine heterodox science leadership is novel and important if one imagines the innovation potential that pluralism offers. The fact that many Nobel laureates address their solitude in the beginning when boldly walking on new territories or doing research in a completely new way implicitly lets us imagine the risky path of heterodox scientists that can pay off with the most acclaimed research honors, if done wisely and strategically.

Heterodox science challenges the orthodox view through methodological advancements. Embracing a wide range of methods that are either invented or applied from other fields can become a vital ground for unconventional science approaches. Changing views from micro- to macro-analysis in physics or economics are examples of methodological advancements. Unorthodox pluralistic methodological approaches are also open to other disciplines and thereby extend the prevailing methods in other fields. Heterodox science is also employed with reality checks of stylized models. For instance, in physics and medicine, direct validity tests are applicable. The current scientific state of the art can become subject to scrutiny if it applies to capture physical laws accurately and if patients get better thanks to medical care. Innovations in focusing on atomic components of all things but also medical advancements as simple as focusing on hygiene around sick patients are examples of major advancements that came out of heterodox science approaches.

The concrete backtesting of given data-driven findings has become en-vogue in social sciences. Examples are camps retesting data-driven social science studies that are predicted to be replicable in only about 60-70% of the time. The so-called ‘replication crisis’ in behavioral economics has seen influential psychologists and behavioral economists’ careers being ended over backtesting and irreplicability of previous results. Open science approaches and pre-registering studies in advance but also data check mechanisms that are currently forming to improve the behavioral economics field for control of data reliability are the newest advancements, which will hopefully also inspire other fields. In macroeconomics, since the 2008/09 World Financial Recession, central banks have started to publish economic variables more openly and invite backtesting of their predictions in the hope to find patterns and correcting for errors more efficiently thanks to a pluralistic approach.

Heterodox Science Leadership

In the study of heterodox science, the question arises why some heterodox scientists are successful in incepting new fields and correctly improving the status quo, while others are doomed to stay unnoticed or on the periphery of the discourse throughout their careers. In order to build heterodox science leadership credentials, positive heterodox science ethics of researchers and institutionalized science diplomacy may help.

This paper will first focus on individual differences in heterodox scientists in order to retrieve success factors of heterodox science leadership in breeding favorable professional science ethics. The article will then recommend institutional changes in order to foster unconventional heterodox ethics and pluralistic leadership into a more influential endeavor.

One of the main differences between successful and unsuccessful heterodox scientists appears to lie in the nature of the critique. If research becomes an obsessive focus on critique and papers end in just criticizing the agenda, principles and conduct of other researchers, heterodox rebels may lose any constructive crowd and collegial allies. One simply does not win positive crowds with negativity. And readers may be left feeling something is missing if a paper is only a critique but does not provide any new insights or a solution on how to make it better. Even with students, it is a wise idea to allow critique in the classroom among peers only if brought forward in a diplomatic way that is encouraging and only if being bundled with concrete steps on how to improve the research.

Another problem of unconventional scientists who make themselves unprominent is when discrimination of excellence occurs. Discrimination of excellence concerns focus on bringing down leadership and those who are at the center of discussion. If the motivating driver of researchers is primarily to oppose the leadership for the sake of opposition to those in power, the core of what science is about gets lost, namely the aspiration to exchange ideas with like-minded scholars and trying to learn from those around.

Another destructive force against heterodox science leadership is colleague amnesia (Puaschunder 2023). This kind of motivated forgetting of colleagues' work appears to be common to bring down like-minded scholars in a passively aggressive way of neglect (Puaschunder 2023). Hardly any mechanisms exist – besides conventional reviews – to address the problem of systemic silos or schools that per se neglect to acknowledge and cite each other's work. Heterodox scientists may be advised to cite the leadership they aspire to become to raise awareness of their work but also only critique colleagues if the critique is followed by showing a way how to do it better.

All the mentioned deficiencies – obsessive critique without showing how to make it better and discriminating against those who are at the center of discussion for their excellence – can be surmounted by positive heterodox science ethics and science diplomacy.

Heterodox Science Ethics and institutionalized science diplomacy

In order to breed positive heterodox science ethics, institutions can aid with open discussion mandates and democratization of knowledge creation. Often critiqued is the hegemony of a few key journals that dominate fields and procreate silos of positive reinforcement of publication circles that practice collective colleague amnesia to other circles. How hard it is to break into insider circles and infuse stimulating new ideas that may offer ways how to make it better is often a challenge mentioned by foreign researchers, scientists from different fields or upcoming scholars. Offering online outlets has improved the variety of publication opportunities as well as opened access to more diverse, interdisciplinary and international groups to comment on emerging scholarship. Sponsoring open science publications institutionally may further this trend.

Most recently popular media outlets have started to address the list of top-ranked journals with the quest for additions from the field of finance in an attempt to stretch the possibilities for publication and extend the list of top journals for a more pluralistic view (Cronin, 2023). Institutions can aid with fair placements of editors-in-chief and credible reviewer dynamics. Professional associations, including interest groups and stakeholder engagement outlets, could aid with oversight of journal executive placements and fair reviews. Professional associations and institutions may also help in incentivizing fresh and innovative out-of-the-box ideas. Educational institutions, professional bodies and career review processes could help with featuring institutionalized trainings, review mechanisms and

incentives for positive critique. Only commenting on others' work for the sake of showing a way how to make it better is one of the most valuable insights for heterodox scientists. Positive reinforcement and constructive critique should become a standard feature of every academic training. Institutional oversight and transparency via social online media but maybe also databases from professional bodies can help curb harmful critique that rests in the negative and discriminates against excellence in unbalanced attempts to bring down leadership. Careers could be made dependent on positive leadership featuring constructive critique and honest aid of upcoming scholars in helping to improve work. In addition, trainings and networking could foster collaboration with leadership, also in the contractual agreements with educational employers. Incentives could be offered for intergenerationally diverse but also interdisciplinary research endeavors alongside clear focus on bundling heterodox schools with orthodox institutions. One institutional attempt to do so are interuniversity consortia. For instance, the largest in the world is the Interuniversity Consortium of New York, in which traditional orthodox schools bundle up with heterodox places in order to foster a stimulating discourse and respectful exchange of ideas.

Institutional mechanisms could also target colleague amnesia (Puaschunder 2023). If institutional waves would break that call out colleague amnesia and define it as a subform of plagiarism, colleagues would be incentivized to give fair credit to inventors of ideas. In all these deficiencies, institutional databases could help fair credit giving with implicit acknowledging mechanisms through transparency of inspiring research. Double-blind review procedures could integrate a communication channel and should feature response mechanisms that help avert colleagues' unfair treatment and unjustified discreditation for institutional competitive advantages (Puaschunder 2023). Lastly, online mechanisms – such as exchange platforms about institutions and their conduct around heterodox science ethics – would become valuable crowdsourcing of information. For example, online anonymous databases and information exchange opportunities promise to aid in career move decisions as a source of insider information as well as may curb harmful uncollegial behavior in fear of transparency about scientific ethical misconduct.

Discussion

Heterodox sciences account for advancing research fields in some of the most innovative ways. In the long history of paying attention to pluralistic approaches to solve intellectual problems most creatively, strikingly hardly any information exists why some heterodox scientists are highly successful in changing the status quo of science and others are doomed to fail in making their valid point to the community and therefore remain in the periphery rather unnoticed.

This article attempted to provide some historical anecdotes on heterodox sciences in order to derive interpersonal and institutional recommendations on how to improve heterodox research introductions. Heterodox science was first acknowledged for its unconventional, more plural viewpoint than the leading orthodox tradition. Heterodox science also prevails in methodological pluralism applying different methods than conventional state-of-the-art *modi operandi*. Heterodox science is also active in a reality check questioning the validity of the current results. The internal validity gets backtested by replication, which has led to scientific advancements in many fields. The external validity gets evaluated in a reality check of stylized artificial models to hold in the real world.

Heterodox scientists are advised to refrain from an obsessive focus on the critique, which may not engage constructive crowds who focus on efficient solution-finding through novel insights and engage in respectful dialogue with peers. Heterodox scientists may also fail to build a supportive network if practicing discrimination of excellence. Trying to bring down those who are in power dominating the field may distract from contributions to the field in better ways of doing research or providing new insights as well as methodological advancements. Heterodox

researchers should also not engage in colleague amnesia. This kind of motivated forgetting of citing colleagues actually harms networking advantages while establishing silos of knowledge and self-reinforcing echo chambers in repetitive one-dimensional school thinking.

Institutional recommendations for heterodox scientists point towards creating positive critique mechanisms and educating on science diplomacy in tactful ways of critique (Puaschunder forthcoming). Institutional associations may create opportunities and incentives to embrace excellence in honest acknowledgment of colleagues' accomplishments. Good governance standards may promote whole-hearted efforts to see others' points of view as well as support collaboration attempts with leading scholars. Science community standards could open discussions and democratization of knowledge creation by offering a multitude of journals with plural outlooks.

As for future research strategies, heterodox science leadership should be thematized in qualitative and quantitative research. Laboratory and field experiments on success factors of heterodox science leaders may follow a preliminary investigation of historical examples of successful unconventional scientists and their research strategies and pluralistic methodological approaches. Interdisciplinary connections and successful pluralistic cross-pollination should be studied qualitatively and quantitatively in order to derive recommendations on success factors of interdisciplinary research. This will also help quantifying the likelihood of success for various interdisciplinary research attempts. Transparency enhancement and an open science catalog of positive examples may help in educating a new cadre of tomorrow's future heterodox science leaders.

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Civil Modes of Acquiring Property in Roman Private Law

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ABSTRACT: *Ius civile* regulates legal relations between Roman citizens. The dominium mentality of the Romans led them to pay more attention to the legal relations specific to the possession of goods. During ancient times, when the Romans were a people of shepherds and farmers, the norms of the old Civil Law established the legal institution of *mancipatio*, which applied only to *res mancipi*. The development of society determined the appearance of other categories of goods, the possession of which could no longer be obtained with the help of *mancipatio*. In order to update the legal regime of acquiring property and relate it to reality, the Roman developed additional civil law procedures that contributed to the improvement of private property and to the crystallization of the concept of patrimony.

KEYWORDS: *mancipatio, in iure cessio, usucapio, adiudicatio, lex*

Introduction

Since ancient times, the Romans had the representation of the idea of dominion over goods, which they put into practice in the form of property rights. But for a long time, they did not see property as a subjective right, as their contemporaries do, but as a power. This fact was due to the warrior mentality of the Romans, who considered themselves descendants of the god Mars, as well as the way the family was organized and the duties exercised by the *pater familias*.

The legal institution of *pater familias* was created during the period of patriarchy, when the man was involved in carrying out the most important activities in the family and in society. For these reasons, the head of the Roman family symbolized the god of war and exercised power over persons and goods. The power exercised over goods was designated by the term *dominium*, which has its origin in the Latin *dominus*, which translates as master.

The evolution of legal ideas has made jurists understand that the control exercised over assets is permanent and that it can be exercised by successive persons. From this moment, the question of creating ways to acquire the right of ownership arose. But the concept of acquiring property contradicted the mentality of the ancient Romans and raised serious practical problems, because power was not transmitted, but created.

The mentioned problems were solved by consecrating some legal procedures that had the effect of acquiring the property right in the old Civil Law. Since legal relationships within Rome could only take place between Roman citizens, the first forms of acquiring the right to property were established by the rules of *ius civile*. Even the jurisconsults from the classical era mention them in their works. This is how Gaius proceeds, who, through his Institutes, conveys to us that *"nam mancipationis et in iure cessionis et usucapionis ius proprium est ciuium Romanorum"* (Girard 1890, 199). To these ways of acquiring property, other Roman jurists add *adiudicatio* and *lex*. Initially, the ways of acquiring property rights were qualified as ways of transmitting things. This concept was used until the end of the Classical Era, when the Romans began to use the concept of acquiring property (Axente 2022, 219).

Mancipatio

It was an act of Civil Law that initially had the effect of acquiring property-power. In very ancient times, *mancipatio* was used to acquire property over *res mancipi.* The ancient Romans, who were shepherds and farmers, included in this category only slaves and working cattle,

because they could hold them by hand. Gaius confirms this and tells us that *adeo quidem, ut eum, qui mancipio accipit, adprehendere id ipsum, quod ei mancipio datur, necesse sit; unde etiam mancipatio dicitur, quia manu res capitur* (Poste 1904, 75). Initially, *res soli* did not fall within the scope of the right of quiritary property, because the land was the object of collective property and could not be held by hand. Against the backdrop of the transition from gentile to state organization, the effects of the first social division of labor became permanent, and the land became an object of quiritary property and entered the scope of *mancipatio*. This was also noted by the jurisconsult Gaius, who tells us that *"eo modo et seruiles et liberae personae mancipantur; animalia quoque, quae mancipi sunt, quo in numero habentur boues, equi, muli, asini; item praedia tam urbana quam rustica, quae et ipsa mancipi sunt, qualia sunt Italica, eodem modo solent mancipari"* (Girard 1890, 182).

The old Roman Civil Law had an exclusive character. For this reason, *mancipatio* was accessible only to citizens. The *veteres* Latins also had access to it, because they too enjoyed *ius commercii* (the right to conclude legal acts in accordance with the norms of Roman Civil Law) (Hamangiu and Nicolau 2002, 351).

In ancient times, *mancipatio* was the formalistic legal act through which the legal operation of sale was carried out (Garrido 1996, 199-200). It was performed by performing a ritual, which also involved the recitation of solemn formulas (Correa 2008, 165). Gaius describes to us, in a few words, the way mancipatio was carried out. In the opinion of the great jurisconsult, *"est autem mancipatio, ut supra quoque diximus, imaginaria quaedam uenditio: quod et ipsum ius proprium ciuium Romanorum est; eaque res ita agitur: adhibitis non minus quam quinque testibus ciuibus Romanis puberibus et praeterea alio eiusdem condicionis, qui libram aeneam teneat, qui appellatur libripens, is, qui mancipio accipit, rem tenens ita dicit: HVNC EGO HOMINEM EX IVRE QVIRITIVM MEVM ESSE AIO ISQVE MIHI EMPTVS ESTO HOC AERE AENEAQVE LIBRA; deinde aere percutit libram idque aes dat ei, a quo mancipio accipit, quasi pretii loco"* (Poste 1904, 74-75).

Gaius completes the information in this text with another statement, according to which *"ideo autem aes et libra adhibetur, quia olim aereis tantum nummis utebantur; eorumque nummorum uis et potestas non in numero erat, sed in pondere"* (Girard 1890, 182). This was due to the fact that in the very ancient era, the price was not weighed, but counted, proof that the ancient ace represented the equivalent of 327 grams of copper. The development of legal ideas and the evolution of legal ideas determined the replacement of weighing the precious metal with touching the balance with a copper bar (Tuori 2008, 503). The final gesture symbolizes the payment of the price and the transfer of ownership.

The transition to the market economy led the Romans to create currency in the modern sense of the word. From this moment, weighing the precious metal was no longer necessary; however, the Romans, who were deeply conservative, did not modify the ancient ritual of mancipatio, proof that they kept the gesture of striking the balance with a coin. The new realities produced certain difficulties, because it happened that the *libripens* did not pay the price, but fulfilled the formality of reaching the balance with the currency. To eliminate this inconvenience, the Romans made reaching the balance with the brass bar conditional on paying the price. *Mancipatio* was used until the post-classical era.

Usucapio

It is another way of acquiring property established by the rules of Civil Law (Axente 2020, 241). According to the jurisconsult Modestin, *usucapio est adiectio dominii per continuationem possessionis temporis lege definiti* (Cătuneanu 1927, 230).

She operated under two assumptions. The first hypothesis is mentioned by the Institutes of Emperor Justinian, which state that *"iure civili constitutum fuerat, ut, qui bona fide ab eo qui dominus non erat, cum crediderit eum dominum esse, rem emerit vel ex donatione aliave qua iusta causa acceperit, is eam rem, si mobilis erat, anno ubique, si immobilis, biennio tantum*

in Italico solo usucapiat, ne rerum dominia in incerto essent. Et cum hoc placitum erat, putantibus antiquioribus dominis sufficere ad inquirendas res suas praefata tempora, nobis melior sententia resedit, ne domini maturius suis rebus defraudentur neque certo loco beneficium hoc concludatur" (Hanga 2002, 85-86). The second hypothesis has its origin in a practice born towards the end of the Republic, when the buyer acquired *res mancipi* by *traditio*. This situation was presented to us through a text from the Institutes of Gaius, according to which *"nam si tibi rem mancipi neque mancipauero neque in iure cessero, sed tantum tradidero, in bonis quidem tuis ea res efficitur, ex iure Quiritium uero mea permanebit, donec tu eam possidendo usucapias"* (Girard 1890, 197).

Simple *possessio* was not enough for *usucapio* to produce its effects. The Roman legal texts also emphasized the need to fulfill four more cumulative conditions: the existence of something susceptible to *usucapio*, good faith, *iusta causa* and the term.

Possessio was dominion that had to be exercised for oneself. This dominion of the work had to be effective, uninterrupted and had to last for the entire period of time necessary for the birth of the *usucapio*. *Possessio* could be interrupted *naturaliter* by *usurpatio*, that is, by the loss of material possession, or *civiliter*, by filing a claim action by the non-possessor owner against the non-proprietary possessor.

The *usucapio* requires the fulfillment of certain conditions by the *res habilis.* First of all, it had to be a Roman thing (Hamangiu and Nicolau 2002, 372), because *usucapio* was an act of Civil Law. Among others, *res furtivae* and *res extrapatrimonium* were not considered *res habilis.* These things result expressly from the Institutes of Emperor Justinian, according to which *"sed aliquando etiamsi maxime quis bona fide rem possederit, non tamen illi usucapio ullo tempore procedit, veluti si quis liberum hominem vel rem sacram vel religiosam vel servum fugitivum possideat. Furtivae quoque res et quae vi possessae sunt, nec si praedicto longo tempore bona fide possessae fuerint, usucapi possunt: nam furtivarum rerum lex duodecim tabularum et lex Atinia inhibet usucapionem, vi possessarum lex Iulia et Plautia"* (Hanga 2002, 86-87).

Good faith consists in the usucapant's conviction that the person who handed over the property was *verus dominus.* This condition was fulfilled if good faith existed at the time of taking possession of the property. This follows expressly from a text in the Institutes of Gaius, according to which *"ceterum etiam earum rerum usucapio nobis conpetit, quae non a domino nobis traditae fuerint, siue mancipi sint eae res siue nec mancipi, si modo eas bona fide acceperimus, cum crederemus eum, qui traderet, dominum esse"* (Poste 1904, 147).

Iusta causa was the legal act or fact that was the basis for taking possession of the asset.

Usucapio also implied the passage of a term, which represented the time interval in which the possession had to be exercised without interruption. The Romans were aware of the effects generated by the passage of time. They transposed them into the legal field for two reasons: to ensure the security of the legal circuit, but also to extend the application of a fundamental legal principle in this hypothesis: *proprietas ad tempus constitui non potest*. In this way, since the time of the Law of the Twelve Tables (Cuciureanu, 2021, 38), it has been highlighted that possession represents the manifestation of the right of ownership. This explains the fact that it also consolidates with the passage of time and can turn into a real property. Certainly, this argument led the jurisconsult Gaius to state that *usucapio autem mobilium quidem rerum anno completur, fundi uero et aedium biennio; et ita lege XII tabularum cautum est* (Girard 1890, 197).

In iure cessio

It consists in the renunciation made before the magistrate (Robaye 2005, 148). This legal procedure was created to fill the gaps in the legal institution of *mancipatio*, which had the effect of acquiring the right of ownership only over *res mancipi. Quirites* could not acquire by *mancipatio res nec mancipi* and *res incorporales.* The problem had to be solved by a formalistic legal procedure, specific to *ius civile,* which could be successfully used in order to acquire these

assets. The most suitable solution was to resort to the graceful jurisdiction. It was the attribute of certain magistrates, who could organize fictitious trials (Garrido 1996, 203-204) in order to acquire one of the powers that the *pater familias* exercised over the assets and persons of his family. Since *dominium* was the power that the *pater* exercised over property other than slaves, citizens could successfully use this legal procedure to acquire property. Moreover, in *iure cessio* it was easy to acquire *res nec mancipi* and *res incorporales,* since the gracious jurisdiction did not involve conflicting interests, which would attract the pronouncement of a sentence of conviction or acquittal and remove the legal act from its finality*; in iure cessio* assumed converging interests and the competition of the magistrate for their realization.

For the organization of the fictitious trial, the parties had to appear every day before the praetor or the province governor. The jurisconsult Gaius describes how this legal act is carried out through the Institutes: *"in iure cessio autem hoc modo fit: apud magistratum populi Romani ueluti praetorem, is cui res in iure ceditur, rem tenens ita dicit: HVNC EGO HOMINEM EX IVRE QVIRITIVM MEVM ESSE AIO; deinde postquam hic uindicauerit, praetor interrogat eum, qui cedit, an contra uindicet; quo negante aut tacente tunc ei, qui uindicauerit, eam rem addicit; idque legis actio uocatur. hoc fieri potest etiam in prouinciis apud praesides earum"* (Poste 1904, 134).

Adiudicatio

It is a legal procedure accessible to citizens, which complements the acquisition of property through court. It is used in the case of the division of one or more assets between the co-owners.

For this purpose, the judicial magistrate drew up a formula by which he empowered the judge to pronounce a sentence in order to terminate the co-ownership. Gaius tells us that *"adjudicatio est ea pars formulae qua permittitur iudici rem alicui ex litigatoribus adjudicare: velut si inter coheredes familiae erciscundae agatur, aut inter socios communi dividundo, aut inter vicinos finium regundorum"* (Girard 1890, 267). It follows from this that the *adiudicatio* was inserted into the formula, which was used in three types of processes: the division of a succession between heirs, the division of an asset between co-owners and delimitation. In the first two hypotheses, the division was absolutely necessary; when it was not the good that could not be divided, the judge assigned it to one of the co-owners, who was obliged to pay the other a *sulta*. In the case of a judgment process, Justinian conveys to us, through the Institutes, that *"dispicere debet iudex, an necessaria sit adiudicatio. Quae sane uno casu necessaria est, si evidentioribus finibus distingui agros commodius sit quam olim fuissent distincti; nam tunc necesse est ex alterius agro partem aliquam alterius agri domino adiudicari: quo casu conveniens est ut is alteri certa pecunia debeat condemnari. Eo quoque nomine damnandus est quisque hoc iudicio, quod forte circa fines malitiose aliquid commisit, verbi gratia quia lapides finales furatus est aut arbores finales cecidit"* (Hanga 2002, 321-322).

Lex

Roman legal texts mention the law among the civil ways of acquiring property rights. *Lex* was a source of law in the formal sense that governed legal relations between citizens. Its role was to provide solutions for situations that did not fall within the scope of the other civil ways of acquiring property rights.

Conclusions

The civil ways of acquiring property were created in order to protect the interests of Roman citizens. They were formed after a long process and managed to capture the dominium mentality of the Romans, to emphasize the superiority of Civil Law over the other branches of Roman Private Law and to contribute to the crystallization of the concept of patrimony.

These legal institutions help us understand the emergence and evolution of property rights and are a source of inspiration for those who want to contribute to the improvement of the legal regime of private property.

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Social and Familial Aspects of Juvenile Conduct Disorders in Romania. Selected Cases Presentation from Forensic Psychiatric Board Admission

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ABSTRACT: Juvenile delinquency in Romania has become a complex problem due to the imbalanced state of bio-psychological and social factors that should ensure the safety of children's development. When discussing children in legal terms, the person is no longer the focus of the problem as in adults, but he should be analyzed as a multitude of intrinsic and environmental factors that coordinated to develop a judicial problem. Most of those environmental factors refer to social aspects like discrimination, poverty, limited access to education, as well as family disorganization, victimization of child and exposure to negative psychological and affective stimuli that distort the emotional, behavioral and intellectual development of those children. Moreover, we can state that delinquent children are a mirror of social and familial problems left unattended or a fault of the system's care for them. Therefore, there is a need to explore more effective protective and preventive measures while strengthening rehabilitation programs for vulnerable groups rather than seeking to isolate them. Given the above statement, the authors present a selection of cases that were addressed to the psychiatric forensic expertise for children. This paper will focus on social and familial aspects that disrupts the affective and intellectual mechanisms of these children, leading to aggressive behavior, lying and delinquencies as defensive and control responses to their disrupted environment. Also, these cases presentations will reveal other important characteristics of the cases and the difficulty of social and legal management of these children.

KEYWORDS: children, delinquency, society, forensic, psychiatry

Introduction

Juvenile delinquency can take many aspects due to the child's inner response to outer stimuli, especially in teenagers, when neurobiological mechanisms lack control, motivation is emotion regulated and impulsivity determines their behavior (Shoemaker 2017). Negative stimuli from the environment are proportional to the severity of the child's act out, often transforming him from victim to the one who victimizes others in order to regain control over themselves and the outer world that put him in a vulnerable condition (Lundman 2001).

In the Romanian legal system, children under 14 do not answer to the law and children between 16 and 18 years old will answer as adults. The range of 14 to 16 years of age is considered a more uneven area, where a child's intellectual and affective mechanisms are coordinating with environmental stimuli to develop the future adult. In this idea, any antisocial act committed between 14 and 16 years of age will be submitted to a forensic psychiatric analysis, to reveal if the child has the capacity to understand his actions and their consequences (Delcea, Fabian, Radu and Dumbravă 2019). As such, the majority of the cases addressed to the forensic psychiatric board is formed of 14 to 16 years old minors who are investigated for violence acts and robberies. Under 14 years old, children are often addressed to the board, being victims of different forms of abuse and neglect. Often, the background story of delinquent children reveals a

history of abuse and family disorganization, social inclusion problems, poverty and poor educative stimulation. So, the dynamic of cases presented to the forensic psychiatric board is only reinforcing the importance of prevention and safe environment for children (Park 2019, 99-112).

Another distinctive aspect of forensic psychiatric analysis in children is the detailed examination of the child's environment. All familial and educational data are gathered as the committee has the responsibility of not only answering the discernment issue but also f making the recommendation in the child's best interest for rehabilitation and social reinsertion. It is for this reason that children in the range of 14 to 16 years old are submitted to expertise: because corrective measures are reserved for severe acts and reiteration risks but the Romanian legal systems almost recognize the system's flaws and tries to "save" the children from disrupted development issues and provide them with care and protection they need, even after they made mistakes (Van der Stouwe et al. 2021).

Influencing factors of juvenile delinquency

From a psychological and biological point of view, we could say the 14-16 years old range is an "Area 51" of adolescence. The dynamics of development take abrupt turns, powered by hormonal and organic changes. Emotional activity is processed without any regulatory cognitive functions as brain control regions (prefrontal cortex) is still immature and amygdala is hyperactivating impulse based behavior, by-passing inhibition centers. It is like the brain promotes active experimenting as a way of gaining experience and predictability for later mature decision making. (Sertdemir et al. 2020) As such, risk behavior, impulsiveness, poor inhibitory mechanisms to heavy external stimuli, are all characteristics of the personality development. These hyperexcitability and powerful, emotional responses to negative stimuli are what form the bases of conduct disorders in children and adolescents and the affective charge is proportional with the environmental influence and the magnitude of the answer (Chabrol et al. 2009).

Violence, lying, theft and other conduct disruptions in children are often a more or less conscient response to stimuli like conflictual situations, an inadequate relationship with an adult, a provocation for taking back control, reactions to feelings of helplessness and fear, a need for attention and they are often a mirror effect of unbalanced emotional filters in the search for self-identity. Most conduct disorders are signs of social and intrafamilial problems and could translate offensive conducts – in order to regain control over themselves, affective conducts – impulsive manifestations of extreme rage, situational responses to conflictual or stressful environment – often lying or acting out for revenge and last but not least, defensive conducts as a response to psychological stress. Aside from the psychological and neurobiological aspects of children conduct, psychiatric and brain pathologies and substance abuse are severity accessory factors (Müller-Fabian et al. 2018).

Family factors are fundamental for a child's development as most of his future personality will depend on parent models and affective relations between family members. Familial and social environment could provide risk factors not only for developing antisocial conduct firstly for child victimization. This is another argument that abuse, in all its variables will transform many victims into future abusers (Nicolaescu and Racu 2021).

Family dynamics can become risk factors when the relationship between family members lack affectionate interactions and instead involve physical and verbal violence, with permanent stress and tension between parents and siblings, when rules are exaggerated or they are completely absent, abrupt dynamics between parents with frequent fights and separations or when one or both parents leave the family or divorce and child custody is not regulated and substance misuse. Risk factors in the relationship between child and parent include inconstant presence of the parent in the child's life, punishment prone discipline, inadequate emotional relationship or lack of it, child emotional neglect or abuse, poor expectations for the child or exaggerated and unrealistic ones. Family structure can also have risk characteristics for victimization of children and conduct disorders. These risk factors may include large family size, multiple siblings and

toddlers requiring care, emotional and physical neglect of unwanted children, divorced parents, unstable relationships or multiple partners involving individuals other than the child's parent, and single-parent families (Nicolaescu 2017).

Social factors are also part of the vulnerability dynamic and they refer to social and professional status (unemployment, dangerous/stressful work conditions, insufficient payment, lack of professional satisfaction), residence elements such as homelessness, crowded and insufficient space or poor hygiene and minimal comfort for living and geographical mobility factors such as frequent residence changes, nomadism and immigration or refugee status. Cultural factors are deeply linked with social characteristics in terms of negative influences and they refer to political disbalance, economic crushes, social and mass media access, educational access cultural ideology such as the general attitude towards children, women and paternity, social exclusion, school bullying, discrimination and religion which can take extremist forms and align to social dynamics inside certain communities (Butoi and Butoi 2004).

Psychological, social and familial risk factors often expose the child to forms of abuse before transforming his behavior. Emotional sexual and physical abuse or child emotional and physical neglect are endemic forms of abuse which consists in an adult, parent or non-parent, takes advantage of the child's vulnerability and dependence and inflicts trauma on the child from its power position. The helplessness, fear inability to defend themselves often twist the child's affective development and conduct towards escaping those negative emotions and regain control over itself. Affective numbness and lack of compassion could also lead to antisocial disorders if they are caused by childhood trauma (Bonea 2017).

Discernment and responsibility are extremely variable in children, especially in teenagers and forensic psychiatric expertise has a different view in minors than in adults, due to the particularities of the developmental stage. Educational status, social and family environment, neurologic status, organic pathologies and the investigation data have to evaluate against the child's statement. Children's imaginative processes and emotional disruptions often translate to simulative behavior and lying in a rich creative way. Series of interviews, psychological battery tests and psychiatric examinations are required for the board to come to an objective conclusion but not necessarily for the child to be submitted to a detention punishment but for the rehabilitation of his development by correcting the negative influences he was exposed to. In some cases, conduct disorders are a result of personality traits that raise alarm signals such as psychopathy and borderline characteristics and require an adequate psychological and psychiatric management before personality is finally crystalized (Mates 2007, 165).

Case 1: Sturge-Weber Syndrome and disharmonic development disorder with psychopathic traits

The first case we would like to present is the one of a 15 years old male from a rural area, addressed to the forensic psychiatric board by the court, because of conduct disorders in the family with severe aggressiveness towards the mother, thefts from home and trying to poison the mother. The court orders a forensic psychiatric evaluation in order to assess the danger that the child could represent for family, society and himself. The mother pressed charges against him as she was no longer able to take care of him. Medical history reveals Sturge-Weber Syndrome, bilateral nystagmus, and retinal detachment of the left eye. He is also in psychiatric evidence for developmental disorder with media addiction.

From the mother's and grandmother's declaration, we found out that the child tried to burn the house, he has frequent verbal and physical aggressive outbursts toward the mother, he tried to slip his psychiatric medication into the mother's food and he is constantly provoking self-harm in order to manipulate situations and steals money from the house.

Educational history reveals that the boy has been admitted to three different educational facilities for children with special needs and he was expelled from every institution for aggressive behavior such as being violent to peers and professors, emotional blackmail, demonstrative self-

harm, defiant and oppositional conduct, lack of interest for school and terrorizing other children or animals. He is considered a potential danger by all three institutions, as it is stated in all psychological evaluations of school specialists.

Social inquiry reveals that the child is an only child from a concubinage relationship between his parents. Both mother and father have partial or total blindness, are unemployed and receive social support, which is very little income. The father abandoned the family when the boy was 5 months old and the boy lives with the mother and maternal grandmother, that takes care of both the daughter and grandchild. In the last year, the mother has a new romantic partner that has come to live with them but does not involve in supporting the boy. Since the last expulsion from school, the boy has not been reinserted in any educative institution because all are refusing to admit him giving his conduct and special needs.

In the boy's file, there is a statement from the judge of the case that reveals the mother's declaration that she wants his son to be extracted from the family as she is no longer able to take care of him and during her declaration, the boy threatens the mother to *"cut off her head"*. During admission to the psychiatric children clinic for forensic evaluation, the boy often manifested violent outbursts towards peers and care-takers, adhesion and manipulative tendencies towards people who could provide benefits, demonstrative self-harm, defiance for rules, and lying to adults and peers that he is adopted and unwanted to gain favors and compassion. Also, he is constantly frustrated by his appearance (facial asymmetry, left-face hemangioma and nystagmus - picture 1). During interviews and sessions, he first denied the facts but then started to admit them and find excuses for each of them. The mother did come to visit and present to the board once during the evaluation and admitted that she is no longer disposed to take care of the child as she has her own special needs and the boy is too difficult. She is the one who asked for permanent admission into a Centre for minors.

Picture 1. Facial aspect of the boy.
(The mother agreed to the dissemination of the picture for scientific purpose)

Psychiatric assessment reveals impulsivity and weak control mechanisms, fluctuant disposition, emotional lability, accelerated verbal flow with disorganization of idea-verbal flow, voluntary amnesia of facts and selective memory, social-media, tv and gaming abusive usage; imaginative mechanisms have strong intrinsic motivation, especially for gaining personal advantages, egocentric tendencies with domination and manipulative elements, voluntary uneven effort of tasks, anxiety symptoms and qualitative sleep disruptions.

Psychological evaluation reveals an IQ score of 89, intellectual uneven acquisitions, poor psychological balance in sustained effort, explosive configuration with anxious elements, logical superego with social success motivation, impulsive disinhibition, altered affective behavior with superficial emotional disposition, tendencies to simulate and dissimulate, low self-esteem, disrupted reactivity to environmental stimuli, egocentric aspects. The evaluation concluded that the boy has disharmonic development disorder with psychopathic elements and the discernment was present at the time of the antisocial acts as he is able to understand and critically appreciate

the content of his actions. He has impulsivity with inadequate reactions to offensive and frustration, low tolerance and self-esteem, demonstrative conduct, egocentrism, manipulative tendencies and displays severe aggressive behavior towards others. There is a high risk of reiteration of the antisocial acts and he represents a danger to himself and others. Due to lack of family support and social educational support, the board recommended his admission to an Educational Centre for Special Needed Minors where he could receive the psychological, therapeutical, affective and educative assistance he needs.

One year after admission to the rehabilitation Centre, he is readmitted to the forensic psychiatric evaluation for re-evaluation. His evolution is stationary as the aggressive behavior, demonstrative, manipulative traits are still manifesting and he is still showing egocentric traits and blames everyone for his negative conduct. He developed more hatred for the mother as she is not willing to take him back home and for forensic psychiatric board members which he threatened multiple times during his stay in the Centre, as care-takers have stated. He refuses to respect rules and undergo therapy for his behavior and he does not show interest in school. The problem with these cases is how we can manage them better without keeping these children isolated from society, especially with adulthood approaching and social management lacking infrastructure to support them when they exit the institutions.

Case 2: Theft, Aggression and Defiance

The second case of this presentation refers to a 14 years old male, from urban area that is presented by the police to the forensic psychiatric board for automobile theft and driving without license. More specific, the boy has found a set of car keys in a park and he walked through the nearby parking lot trying the keys on every car until one opened. He drove the car through the town during the day and then he entered another parking lot where he tried to make drifts until the police arrived. In that moment, he tried to escape the police cars by sliding between them but he lost control of the car and hit the side of the road.

From the social inquiry, we learn that the boy lives with his father and brother, in a high delinquency rate area of the town. The mother has abandoned the family with a half-brother of the boy and has had no contact with the family since then. The father is unemployed and has little income by working minor temporary jobs. The boy has adhered to antisocial prone groups in the residential area and has been involved in violent altercations with peers before.

Educational background reveals that the boy is a 7th grade student with lots of school absences and he repeated 5th and 6th grade. He also has a history of verbal and physical conflicts at school and defiant or oppositional manifestations to rules and authorities.

Psychological evaluation and psychiatric interviews during admission for forensic expertise reveal an IQ of 85 psychological impulsive-explosive configuration and conduct disorders due to poor adaptative function and intrafamilial distorted relations. He reveals poor interest for rules and educational stimuli, he lacks empathy for his acts and manifests as defiant to authority and ignoring the negative characteristics of his actions. The power display he acts in front of the board is contrasting with aggressive outbursts in minimal affective stimuli which suggest disruptive emotional background.

Picture 2. Aspect of tree and house drawing during psychological evaluation

The board considered that the conduct disorders have multifactor causes as he lacks educational support, affective relationships with the mother and has low rule and responsibility at home and also, adhered to delinquent peer groups, often manifesting inside the group as the leader. He was recommended educative and social support initially without admission to corrective Centre. One month after the first expertise, the boy is again addressed to the board for two new acts of theft. The evolution was not showing positive development as he was running away from home with his peer group and he still lacked interest in school. As such, he is addressed to a Corrective Centre for young delinquents. Two months after, he is re-submitted to the board for two new aggressive acts and thefts, conducted in group with others. The corrective Centre psychologist describes him as an impulsive and extremely aggressive and defiant child with multiple escape attempts and low interest in any educative and positive activities inside the peer group. Due to the risk of reiteration of antisocial acts and the augmentation of the negative behavior, from theft to violence, he is recommended to a liberty privative facility for young delinquents. Again, the social rehabilitation has low prognosis as he has almost 17 years old at the last forensic board evaluation and he will soon be considered an adult. The risk for reiteration of antisocial activity will grow even more as the child approaches adulthood and we wonder if there is anything else the system can do for these children before it is too late.

Case 3: Lying and revenge

The third case in this presentation refers to a 13 years old girl, from rural area, that is addressed to the forensic psychiatric board as a victim of sexual abuse from a non-familiar adult. Social history reveals that the girl lives with his father and four other brothers and the father's concubine in three room houses in rural area. The father's girlfriend has just given birth to a child a few months ago. From the social inquiry results that both the father and the concubine are morally dough full persons and are often consuming alcohol. The home has low hygiene facilities and comfort elements (no water – they need water from the river, they need to make wood fire for warm). The father has a criminal record and he works temporary small jobs. The concubine is unemployed also. The mother of the child had abandoned the family a few months ago accusing the father of domestic violence. She has left with a friend of the father who has stayed in the one for months before the departure. The man the mother left with, is the accused person of sexual abuse on the girl. Social inquiry also stated that before the departure, the mother took the children for begging and they were found multiple times on streets, poorly dressed and hungry.

The educational history states that the girl is a 4th grade student with low school results that has lately abandoned the classes. Also, the teacher's description state that the child is poorly communicative, isolated and they have poor communication with the parents. The history of the case state that the girl has admitted the abuse to the father, immediately after the departure of the mother with the man. The father tried to contact the mother by phone and tell her what had happened but she did not manifest any interest in the subject and declared that she will come at the police to see if the girl tells the truth. Since then, the mother could no longer be contacted. The girl described normal and oral sexual intercourse with the man, detailing the act with extremely specific details (sperm that looked like liquid soap, and the anatomical description of sexual organs and acts).

Immediately after the official accusation, the girl was taken by the police to be gynecologically examined. The first examination revealed a hymeneal slight discontinuity that could date longer than 10 days. Due to these findings, the girl is admitted to the university institute for forensic psychiatric expertise. She is submitted to multiple interviews and psychological evaluations that do not reveal post-traumatic stress symptoms. Also, there are evident disagreements between same details of every day interviews and when the girl is asked about those details, she shows psychological distress with mimic repetitive gestures and facial erythema. She is resubmitted to a gynecological evaluation in the university forensic

medicine institute that reveals that the discontinuity on the hymen is actually a tissue fold that could not be intact if a complete sexual intercourse should happen and the girl is in fact, a virgin. The psychological evaluation revealed an IQ score of 80 due to intellectual sub-stimulation. The girl's attitude is often ambivalent and she manifest blockage behavior as a defensive mechanism in relation with lying. The psychological battery tests revealed simulative signs.

Picture 3. House and tree drawing during psychological evaluation

The intrinsic motivation for lying over a sexual abuse is the feeling of fury over the mother's leave and need for revenge. After almost five weeks of admission and multiple evaluations, the girl recognized that she was lying because she thought that her mother will come back to her and leave the man. But this was not the only motivation she had. She admitted that she was taking care of all her brothers and had to wash clothes, cook and carry heavy cans of water from the river for the household which she didn't want to do anymore. She admitted that an aunt of hers talked to her about sex and showed her porn videos. She also admitted that she does not go to school because her father needs her to work in the house and if she goes to classes she is bullied by peers because she is dirty and poor. She also feels neglected emotionally by the father as he is more aware of the boys then of her. She stated that she needed to escape from home and be placed in social care because she heard that in this way, someone will take care of her and keep her clean and she could then go to school and become something.

The girl has intellectual potential but was under-stimulated and emotionally neglected and abused which made her transform fantasy into reality as a protective mechanism. The board recommended an extensive social inquiry in order to analyze her situation and the case of the siblings. The conduct disorder manifested by lying is a result of family neglect and emotional depravation with low positive intellectual and social stimuli which led to a fault in a distorted perception of moral values. She has also low understanding of erotic content and information and a low capacity of understanding the implication of these acts. The recommendations were formulated in order to secure the girl's welfare, development and rehabilitation in the social protective system. The follow-up after three months revealed an improvement in verbal communication skills, an increased social adaptability and school reintegration under social protection. The girl's development will be regularly observed.

Conclusions

Most of the children that are admitted for forensic psychiatric expertise in Romania come from disrupted social and familial backgrounds, with urban and rural provenience becoming more and more equal. Violent relationships between parents, abandonment by one or both parents, lack of rules and educational stimulation, alcohol abuse, social discrimination and lack of responsibility or exaggerated responsibility of the child in the family are most common negative environmental influences identified in this area's forensic psychiatric expertise.

Lying in children as revenge and punishment for inadequate parenting are often seen in under 14 years old children, whereas aggressive behavior and antisocial conduct are often seen in children with risk factors in early childhood that develop control issues, impulsivity and delinquent group adherence in order to find their true identity and regain control over their lives.

The most important issue remains the psychological, social and familial factors that need to be corrected in the environment of the child, as simple isolation and rehabilitation institution are not enough in this stage for a strong and healthy social realignment. More specific measures should be taken for each case, given every particularity it has and general social assistance and legal management should sustain psychological and educative specific addressing. Isolating and extracting the "problem" from society will further disrupt the child's affective and defensive mechanisms. Therefore, rather than relying just on theoretical approaches, it is crucial to prioritize practical true inclusion for these cases. Risk of reiteration and adult antisocial conduct are still important aspects of juvenile delinquent, with statistics still showing high rates of recidivism and we still need to figure out new ways for correcting and providing these children's need for affective, social and educational support.

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Influence Peddling, a Controversial Crime Applicable to an Obsolete Criminal Policy

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ABSTRACT: I have deliberately used the archaism "obsolete" to highlight the very expired, outdated and outmoded character of the notion of the crime of influence peddling. Since the crime of influence peddling belongs to the category of corruption crimes, our approach should not be misinterpreted, i.e., in the sense of potentializing this phenomenon that we consider cancerous for a democratic society, but in the sense of updating and progressing Romanian criminal policy relative to this crime. The establishment of a "legislative footprint", defined as "a comprehensive public register of the influence of lobbyists on a normative act", would be an effective way to reduce the risk of inappropriate influence and, at the same time, to increase the transparency of the adaptation process of policies within the EU, as revealed in a document issued by Transparency International (Berg and Freund 2015, 4). The present scientific-legal approach is likely to adapt, through a new proposed meaning, the notion of influence peddling crime to the objective reality of current criminal policies and respect for the fundamental freedoms of citizens according to the rules of the European Union and to overcome the obscurity of the elements constitutive of this crime.

KEYWORDS: crime, influence peddling, concept/definition, criminal policy, social reality

1. Introductory considerations

It is well known that in Western countries with a solid and perennial democracy, influence peddling takes the legal form of lobbying, the latter being the activity of a group or individual who tries to get the legislative or executive branch to adopt a position or take a decision that serves the legitimate interests of that group.

Criminal law, as a science and as a branch of law, differs from state to state, depending on the specifics of each state's criminal legislation and criminal policy. Currently, with all the diversity of European Criminal Law, there is also a Community Criminal Law based on treaties and international conventions, which is based on the cooperation of European states on the basis of the European Convention for Human Rights (Pradel and Corstens 1999, 16). We are talking about the rules of Community Criminal Law adopted by the member states of the European Union, which have created specific bodies in their institutional plan. In relation to these changes, the definitions were diverse and had corresponding limits and modifications.

2. Diachronic view relative to the crime of influence peddling

The incrimination of influence peddling in Romanian legislation has a long tradition. Thus, the Romanian Criminal Code from 1865 regulated in chapter II entitled "Crimes and misdemeanors committed by civil servants", section IV – "On bribery of civil servants", in art. 146, that: "any individual who, in his name, or in the name of any civil servants, administrative or judicial official, with or without his knowledge, directly or indirectly, will demand, take, or will cause him to be promised gifts or other illegitimate benefits, to intervene, to do or not to do any of the acts related to the attributions of that official, he will be punished with imprisonment from six months to two years and with a fine double the value of the things taken or promised, without this fine being less than 200 lei. The things received, or their value, will be used for the benefit of hospices or charity houses of the locality where the act was committed. And if the mediator will be a civil servant, he will lose the right to hold positions and will not be able to receive a

pension". In the *Criminal Code of 1936* (also called the Criminal Code of Carol II), in art. 252 was ordered relative to the offense of influence peddling under art. 252 that – "the one who, taking advantage of the real or supposed influence that he would have with a civil servant, receives directly or indirectly or causes him or another to be promised any gift, benefit or remuneration, for his intervention on next to that official, to do or not to do any act that falls within his duties, commits the crime of influence peddling and is punished with correctional prison from 6 months to 2 years, a fine from 2,000 to 10,000 lei and a correctional ban from one at 3 years. If the guilty person receives directly or indirectly, or causes to be given or promised, to him or to another, any gift, benefit or remuneration, under the pretext of having to buy the favor of a civil servant, the punishment is correctional prison from one to 3 years, a fine from 2,000 to 10,000 lei and the correctional ban from one to 3 years. The things received or their value are taken for the benefit of the fines fund."

The Criminal Code from 1936 reveals in art. 252 the notion of influence peddling offense as follows: "the one who, taking advantage of the influence or the real or supposed influence he would have with a public official, receives directly or indirectly or causes him or another to be promised any gift, benefit or remuneration, for his intervention in the presence of that civil servant, to do or not to do any act that falls within his attributions, commits the crime of influence peddling and is punished with correctional prison from one to three years, a fine from 5,000 to 10,000 lei and correctional ban from 1 to 3 years. However, if he receives directly or indirectly, or causes any gift, benefit or remuneration to be given or promised to him or another, under the pretext of having to buy the favor of a public official, the penalty is correctional prison from 2 to 5 years, a fine from 5,000 -15,000 lei and correctional ban from 2 to 5 years. The one who, relying on an alleged assignment from an official person, asks an authority to do or not do an act within its attribution, will be punished with correctional prison from 2 to 5 years and a fine from 5,000-10,000 lei. The objects received or their value are taken for the benefit of the State."

The Criminal Code from 1969, in art. 257, defined influence peddling as: "receiving or claiming money or other benefits or accepting promises, gifts, directly or indirectly, for oneself or for another, committed by a person who has influence or lets it be believed that has influence on an official in order to determine him to do or not to do an act that falls within his duties, is punished with imprisonment from 2 to 10 years."

3. Analyzing the constitutive content of the offense of influence peddling and proposing a new form

In the current Criminal Code (2014), the criminalization text of influence peddling, respectively art. 291 para. (1), is the following: *"Soliciting, receiving or accepting the promise of money or other benefits, directly or indirectly, for oneself or for another, committed by a person who has influence or who alleges that they have influence over a public servant and who promises they will persuade the latter perform, fail to perform, speed up or delay the performance of an act that falls under the latter's professional duties or to perform an act contrary to such duties, shall be punishable by no less than 2 and no more than 7 years of imprisonment."*

As indicated in Decision no. 489/2016 of the Constitutional Court of Romania, published in Official Gazette no. 661 of August 29, 2016, "the promise can be explicit or implicit, when it results from factual circumstances, and the crime exists regardless of whether the promised intervention took place or not and regardless of whether the performance of a legal or illegal act was pursued. At the same time, the Court notes that only the act of preparation that comes close enough to damaging the protected social value is to be criminally punished, from this perspective the new law is the more favorable criminal law and also the new Criminal Code regulates the crime more clearly and predictably of influence peddling".

Analyzing the objective side of the crime of influence peddling, it follows that the material element includes three alternative normative modalities, respectively: claiming, receiving or accepting the promise of money or other benefits, directly or indirectly, for oneself or for another, each of which is doubled by the promise of intervention by the civil servant.

The author of the crime, relying on a real or presumed influence on the civil servants, promises that he will cause him to perform, not to perform, to expedite or delay the performance of an act that falls within his official duties or to perform an act contrary to these duties. From this it follows that the act for which the intervention of determination is promised must fall within the duties of the civil servant.

Inevitably, it is about joint actions, since the legislator uses the conjunction "and", using the phrase "and which promises (…)". So, a first finding is that the actions of claiming, receiving or accepting the promise have no criminal relevance - from the perspective of this crime - in the absence of the promise of intervention. Also, only the promise, without any of the three alternative actions, does not fulfill the material element of this crime and the promise to determine the public official must be subsequent to or concurrent with the claim, receipt or acceptance of the promise of money or other benefits.

We consider it absolutely inadvertent from a legal point of view for a person to be held criminally liable if he causes a civil servant **to perform an act that falls within the latter's powers.** We predict that the Criminal Law should not regulate labor relations, but order attitudes and behaviors that come into conflict with social relations considered normal/natural. It is not in the nature of a correct criminal policy for a person to be held criminally liable if he causes a civil servant to perform an act that falls within his duties, an act that he is obliged to perform anyway. If we analyze the hypothesis in which an employee of a public institution, accepts the promise of being promoted by his director because, having influence on his colleagues, he will cause them to finish the work they are tasked with and which he would have finished anyway, but possibly in a longer time. In the example provided, the person who accepted the promise to be promoted if he will induce his colleagues to perform acts that fall within their scope of activity and which they would have performed anyway, commits the crime of influence peddling under the current regulation.

We concede that the syntagma in the content of the crime according to which the civil servant will be determined "to perform an act that falls within his official duties" cannot be accepted because the performance of official duties represents the normality/naturalness of the activity of a civil servant and the criminal law must sanction only the phrases: "not to fulfill, to expedite or delay the fulfillment of an act that is part of his official duties or to perform an act contrary to these duties", because only the last phrases represent deviations from the normal performance of the professional activity.

Consequently, *de lege ferenda*, we propose to remove from the typology of the crime of influence peddling, the phrase (...) ***to perform*** (...) *an act that falls within his official duties* because it does not correspond to the character of the criminal law to ensure the legal framework corresponding to a normal development of society, in the context of respect for human rights and the other values that constitute the scale of social values protected by legal norms, putting in the foreground in the hierarchy of values protected by the criminal law, the supreme value - the human person.

Next, the legislator, relative to the crime of influence peddling, uses the notion of "promise to determine" with the meaning of action complying with the material element, so the attitude of the perpetrator must be described as a firm commitment, unequivocal, express, with a precise objective of determining a certain conduct of the civil servant, which excludes the meaning of implicit conduct, deduced from the circumstances in which a person acted. Consequently, the meaning of the term "promise" in the text of the incriminating law is that of "word, speech" - expressed by live speech - and not "silence", which only exceptionally and exclusively in civil matters is assimilated to the manifestation of externalized will (consent).

It is very important to mention the fact that the idea of the implied promise exceeds the typicality of influence peddling and, consequently, even less could those situations be accepted in which the judicial bodies presume the existence of the promise, but not from the existence of a known fact (proved as such), but from the assumption of the existence of the latter, that is, presumption to presumption, which leads to fiction.

The European Court of Human Rights shows that de facto presumptions are admissible only to the extent that they are reasonable, presuppose things that are difficult or impossible to prove and can be overturned by the person concerned (Case of Salabiaku v. France, Decision of October 7, 1988). However, the ECHR rules that de facto or de iure presumptions are not incompatible with the presumption of innocence under the condition of being reasonable and proportionate to the intended purpose (The Falk v. Netherlands case, Decision of 19 October 2004), and they must fall within reasonable limits, which take into account the seriousness of the presumed situation and keep a limit so that the right of defense can be exercised (Phillips v. Great Britain, Decision of July 5, 2001).

In accordance with art. 291 para. (2) Criminal Code, *"money, valuables or any other goods received are subject to confiscation, and when they are no longer found, confiscation is ordered by equivalent"*. Consequently, according to the doctrine (Bodoroncea 2014, 644), the money, values or other goods that were only claimed or whose promise was accepted will not be subject to confiscation, just as the sums of money made available for the realization of the flagrant will not be confiscated either, these being returned to the criminal investigation body. If a conviction is ordered for committing the offense of influence peddling, the institution of extended confiscation can also be applied to the extent that the conditions provided for in art. 112 of the Criminal Code are fulfilled cumulatively.

4. Delimitation of lobbying to influence peddling

Regarding the regulation of lobbying activities, at the European level, both the European Union and the Council of Europe have preferred non-binding legal instruments ("soft-law" approach), generally based on a system of self-regulation and the adoption of ethical codes, in contrast to the North American paradigm, which opted for binding legal instruments ("hard law" approach), based on rigorous and detailed rules, which may attract sanctions in case of their violation (Tănăsescu coord. 2015, 6 and 37).

According to a document issued by Transparency International, an effective way to reduce the risk of undue influence and at the same time increase the transparency of the policy adaptation process within the E.U. consists in the establishment of a "legislative footprint", defined as "a comprehensive public register of lobbyists' influence on a normative act" (Berg and Freund 2015, 4).

In Romania, the distinction between influence peddling and lobbying is emphasized in the National Anti-Corruption Strategy for the period 2016-2020, approved by G.D. no. 583/2016, which is based on art. 5 of the United Nations Convention against Corruption, regarding policies and practices to prevent corruption. Thus, in order to achieve Specific Objective 3.3 regarding increasing integrity, reducing vulnerabilities and corruption risks in the activity of members of Parliament, it is foreseen to introduce rules on how members of Parliament interact with people who carry out lobbying activities and other third parties who try to influence the legislative process, according to the GRECO Recommendation, Round IV, paragraph 42, which will be taken into account without affecting the criminal normative framework and without it generating a decriminalization of influence peddling (point 4) ("Doctoral and Postdoctoral studies Horizon 2020: promoting the national interest through excellence, competitiveness and responsibility in Romanian fundamental and applied scientific research", contract identification number POSDRU/159/1.5/S/140106. The project is co-

financed from the European Social Fund through the Sectoral Operational Program Human Resources Development 2007-2013).

Relative the regulation of lobbying activities in Romania, a draft law (PL-x no. 739/2011) was registered in 2011 and is still in the legislative process. According to the statement of related reasons, the purpose of the draft law is to define the specifics and limits of lobbying activities, the parties involved in such activities, the conditions for acquiring the quality of lobbyist, obligations regarding the registration and declaration of lobbying activities, as well as the relationship between lobbying issues with public authorities. At the same time, it is appreciated that the regulation of lobbying activities is imperatively necessary in Romania, among other reasons, and to draw a clear distinction between the legitimate mechanism for influencing legislative decisions (lobby) and illegitimate mechanisms, which are likely to create conflicts of interest and influence peddling.

Conclusions

We consider that the criminal policy of any state must be in relation to the existing objective social realities and look at the measures and means that must be adapted and applied in order to prevent and combat the criminal phenomenon for a given period. Between the general policy of the state and its criminal policy there must be a full concordance for the means of preventing and fighting crime to be fully effective. For this purpose, we considered that our intervention, through the proposed *de lege ferenda*, supports a current criminal policy and is consistent with European criminal policies.

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Impact of Artificial Intelligence on Education

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ABSTRACT: While no one knows how AI will shape the future, we can all agree on one thing: AI is one of the most important technologies in the world today that is already at work in our everyday lives, influencing everything from online dating to our shopping habits. But how will this technology affect work in the future? What will be the result? A permanent class of people who can not find work because their jobs have been automated? An economy where super-intelligent computers compete to one day take over the planet? What is happening to people, how do we transform and adapt our education systems to be consistent with the digital age? According to research, by the mid-2030s, one third of all employees will be exposed to the risk of being automated, and the labor force segment most likely to be affected is people with a low level of education (Vimal 2022). Education can change everything in the sense that human reasoning will continue to be necessary, at least at every level and in all industries. Instead of "humans or computers," the challenge for all-round education should be summed up as "humans and computers engaged in sophisticated systems that promote industry and wealth."
KEYWORDS: Artificial Intelligence, Modern Education, Computers, New Skills, Future Occupations
Introduction

Introduction

Education plays a key role in the development of human civilization. Since ancient times, the method of learning is constantly evolving and undergoing numerous changes due to new technologies. We are all familiar with traditional ways of learning where education is imparted within the walls of classrooms to a group of students. With the intervention of the internet and digital technology, the online platform is trending slowly and surely taking the place of classrooms. Thus, the modern education system has completely eradicated the space limitation of a classroom by encouraging the participation of more students from every corner of the world. By providing knowledge through online platforms or websites, the modern education system has been able to attract a variety of students and teachers to participate in technology-based learning. Freed from any kind of limitations of time, space or number of students, the popularity of online learning is increasing day by day. Still constantly changing to ensure the quality of education, online learning has a number of benefits – flexibility, lower costs, and wide range of content.

In recent decades, Artificial Intelligence (AI) has become increasingly present in our lives, having a significant impact in various fields, including education. Education has undergone a series of changes and under the impact of artificial intelligence that brings with it the opportunity to transform, to adapt the way the teaching/learning process is carried out. There is a need to research the impact that artificial intelligence is having on education as we know it, and how we can use this discovery to improve the experiences of students and teachers. Therefore, we start this study with the definition and characteristics of artificial intelligence. Thus, artificial intelligence refers to the development of systems and machines that can simulate intelligent human behavior, such as learning, reasoning, and problem-solving. It involves the use of algorithms and complex mathematical models to enable machines to learn and improve their performance autonomously and the fundamental purpose of AI is to enable machines to exhibit traits specific to human intelligence.

One of the key elements of Artificial Intelligence is the ability to learn. Intelligent systems are designed to learn from data and experiences, identify patterns and trends, and improve their performance over time. This is achieved through the use of machine learning algorithms and

artificial neural networks, which allow machines to process information, identify patterns and make predictions or decisions based on them.

Reasoning is another crucial aspect of Artificial Intelligence. Intelligent systems are able to use available information to make logical decisions and solve complex problems. They can use rules and algorithms to analyze data, extract relevant information and generate desired results or solutions.

Problem solving is the essential skill of artificial intelligence that uses intelligent systems to approach and solve various problems, be they mathematical, logical or related to information processing. They can use specific algorithms and methods to find optimal solutions or make decisions based on the objectives and constraints involved.

It is important to note that Artificial Intelligence can be classified into two main categories: weak artificial intelligence, which refers to specialized systems designed to perform specific tasks, such as speech recognition or machine translation, and strong artificial intelligence, which involves the development of systems that they have general cognitive skills and can understand and solve problems in a wide range of domains.

In conclusion, artificial intelligence refers to the development of systems and machines that can simulate intelligent human behavior and through the use of algorithms and complex mathematical models enable machines to learn, adapt and improve their performance in an autonomous way.

The use of artificial intelligence in education

The use of Artificial Intelligence continues to grow in the education sector. It is becoming increasingly clear to all that it offers many exciting possibilities for the learning outcomes of pupils/students and already promises important help in achieving modern educational goals. We will briefly examine some potential benefits that AI offers to students and teachers.

AI brings benefits and opportunities to education by facilitating personalization of learning, providing instant feedback and improving efficiency in the assessment process. Thus, artificial intelligence can be integrated into online learning platforms, allowing content and activities to be customized according to the needs and knowledge level of each student. Learning management systems can use artificial intelligence to provide personalized recommendations, automatic feedback and monitor student progress. Thus, pupils and students can access relevant materials and resources according to their individual needs. Virtual reality can also help students encourage collaboration and teamwork, and tools like social media can be used to connect students with their peers and instructors.

Furthermore, AI can be used to create tutorials and interactive virtual assistants, systems that can answer students' questions, provide additional explanations, and guide students in real-time through the learning process. Thus, through tutorials and virtual assistance students can benefit from additional support and learn at an individualized pace receiving real-time guidance to support the learning process (Mahendra 2023).

If we talk about *the verification part of learning*, AI can automate many time-consuming administrative tasks in teaching and learning. It could be grading assignments, providing feedback on student work, or even detecting plagiarism. Artificial intelligence algorithms can be trained to recognize patterns and evaluate student responses in various subjects. This allows teachers to receive quick and detailed feedback on student performance, provide personalized interventions based on each student's individual needs, and even save time and resources.

One of the key aspects of the influence of artificial intelligence in education is the ability *to adapt the learning process to the individual needs of pupils/students*. By collecting and analyzing data about student/student progress and performance, AI can identify weaknesses and automatically adapt content and teaching methods to support individual performance improvement. Thus, a personalized and more effective learning experience can be ensured.

A highly effective use of AI is to *forecast performance through data analysis, identifying patterns and trends*. By collecting and analyzing data about student performance and behavior, AI can provide valuable insights into individual performance and make predictions about a student's success or failure. This can help teachers and schools make informed decisions and provide early intervention to support pupils/students.

I am adding here some benefits for *eliminating manual administrative work in schools*, colleges and universities, such as scheduling, rescheduling classes, marking attendance, marking papers, finance and accounting and record keeping. The same can be said for tasks ranging from managing large data sets to processing student requests and coordinating extracurricular activities, large time-consuming activities that can now be outsourced to AI. Also, the administration of the premises often consumes a lot of time. With AI capabilities, these repetitive tasks can be automated - monitoring water and energy consumption, controlling heating or air conditioning. Student transportation falls into the same category, an area where AI can have a major impact.

But while artificial intelligence brings many benefits to education, there are also challenges and concerns associated with its widespread use. These include privacy and security of personal data, lack of human interaction, which can affect the development of pupils/students' social and emotional skills, trust in the system which requires these systems to be transparent and provide clear explanations of how they arrive at conclusions and recommendations.

I believe that the use of artificial intelligence in education brings with it a number of significant opportunities and advantages even if limitations are also identified. From personalizing learning to instant feedback and automated assessment, AI can improve the teaching and learning process, providing a more efficient and effective experience for students and teachers. However, it is important to strike a balance between technology and the human aspects of education.

To the Occupations of the future

The impact of artificial intelligence on future occupations is inevitable and complex. Automation, decision assistance, creation of new jobs, transformation of existing occupations and the need for professional adaptation are some important aspects to consider. It is essential that we anticipate these changes and prepare properly to face the challenges and opportunities that AI brings to the future of our occupations. Through continuous learning, reskilling and personal development, we can take advantage of the advantages that AI brings and successfully adapt to the evolving labor market. We will examine the major directions for the transformation of work in the society of the future and, above all, the need to adapt education to these impending changes.

Thus, one of the most obvious consequences of the introduction of artificial intelligence into the work process is automation, which involves reducing the demand for human labor. AI systems can be trained to take over repetitive tasks and manual work, thereby eliminating the need for human intervention in those areas. For example, in the manufacturing industry, robots and collaborative robot systems have taken over many of the tasks that were previously performed by human workers. Nowadays, more and more companies around the world are using robots to automate their manufacturing processes. In fact, two years ago it was estimated that, by 2025, investments in this field will increase more than 20 times – from 373 million to 12.3 billion dollars. And the pandemic has made the need for producers to adapt to the new challenges much more pressing. So, the segment of these robots is growing (Coșman 2021).

Decision support and performance optimization is the second big area where massive influence will be achieved. Artificial intelligence can support human professionals by providing real-time analytics and insights. AI systems can process and analyze large amounts of data in a fast and accurate way. Thus, they can provide personalized recommendations and solutions, thus supporting the decision-making process in areas such as health, finance or marketing, and human professionals can benefit from strong support in optimizing their performance and providing more efficient and accurate services.

As AI advances, there are occupations that are no longer as necessary, but at the same time, new employment opportunities are emerging. Developing and implementing AI systems requires subject matter experts, data engineers, programmers, and data analysts. These professionals are essential to the design, implementation and maintenance of AI systems. Therefore, technological growth can bring employment opportunities in the field of this and related technologies.

It is already well known that the use of artificial intelligence can completely eliminate some existing occupations, but it can also transform them. For example, in the field of medical services, AI can take over certain tasks, such as analyzing medical images or interpreting patient data. This allows human healthcare professionals to focus more on clinical aspects and patient interaction, thus adding value to their occupation. Therefore, occupations may undergo a transformation where some tasks will be taken over by AI systems and human professionals will focus on more complex and value-added aspects.

In this evolutionary context, adaptation and professional retraining are required every day. Certain occupations may become obsolete or be replaced by technology. Therefore, it is very important that workers engage in continuous learning and develop their digital skills so that they can adapt to technological changes and find new employment opportunities in the digitized economy. Adapting education to changing occupations is essential to prepare the future workforce to face the demands and challenges brought by technological development and Artificial Intelligence. Why is it important to adapt education to the transformations of current occupations? We will make some arguments.

The relevance of skills: The occupational transformations involved by AI require a new set of skills and knowledge, different from what has been developed so far. Thus, it is important that education in the workforce find and provide a relevant and up-to-date curriculum that prepares students for the future demands of work. Skills such as programming, data analysis, critical and creative thinking, problem solving and collaboration are becoming increasingly important in the digital age and they need to be created and developed through new programs to meet these demands.

Encouraging critical thinking and innovation: AI brings with it opportunities and challenges that require critical and innovative thinking. It is essential that education encourages pupils and students to develop these skills through teaching and assessment methods. By stimulating critical and innovative thinking, individuals capable of adapting to change and generating innovative solutions in the context of new occupations can be formed.

Flexibility and continuous learning: Career transformations don't stop with a degree or qualification. In the age of AI, continuous learning becomes essential to stay current and competitive in the job market. Education must promote the idea of lifelong learning and provide opportunities for professional development and retraining for workers in various fields.

Multidisciplinary approach: Changes in occupations often bring with them an increased need for a multidisciplinary approach. For example, technology professionals must have a thorough understanding of the social, ethical, and legal issues associated with AI. Therefore, education must promote collaboration between different disciplines and encourage interdisciplinary understanding of complex issues.

Developing unique human skills: As automation and AI take over certain tasks, it is important that education focuses on developing unique human skills that cannot be easily replicated by technology. These include communication skills, empathy, creativity, critical thinking and complex problem solving. Education must provide opportunities for the development of these skills and promote holistic education.

In conclusion, adapting education to changing occupations is vital to ensure that the future workforce is prepared for the challenges and opportunities brought by technological development and the widespread use of AI. By promoting the relevance of skills, critical

thinking and innovation, flexibility and continuous learning, multidisciplinary approach and the development of unique human skills, education can play a significant role in preparing individuals for their professional future.

Conclusions

I believe that there is a reasonable chance that artificial intelligence can and will become part of the workplace of the future in many ways and the future of education is closely related to it. By making learning more accessible and personalized, AI has the potential to revolutionize education for the better. And while the education industry is not yet ready to accept humanoid robots in the classroom, it is clear that Artificial Intelligence has a future in transforming education.

Artificial Intelligence can play a crucial role in personalizing learning, enabling content, pace and teaching style to be tailored to individual students' needs and preferences. Through AI systems, personalized learning programs can be created that foster the development of unique human skills by focusing on each student's specific strengths and interests. AI-based technologies can also facilitate communication and collaboration between students and between students and teachers. These tools can promote the development of unique human skills, such as communication, negotiation or teamwork skills.

AI can be used to give students access to innovative resources and tools, such as design software or creative virtual assistants. These technologies can stimulate creativity and critical thinking, giving students opportunities to explore new ideas, develop their imaginations, and find innovative solutions to complex problems. By personalizing learning, continuous and formative assessment, fostering collaboration and communication, encouraging creativity and critical thinking, and developing complex problem-solving skills, AI can help create a new educational environment that holistically develops the skills essential for success in a world of continuous digitization.

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Renewable Energy in the European Union

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ABSTRACT: The European Union has set ambitious targets for renewable energy, aiming to increase the percentage share of renewable energy in gross final energy consumption and promote its use in transportation and heating sectors. Romania, having a significant potential in renewable energy, especially wind and solar energy, can play an important role in achieving these goals. The exploitation of abundant natural resources and the development of production capacities in wind, solar and hydropower can contribute to the transition to a cleaner and more sustainable energy system, bringing economic and environmental benefits to the country and contributing to significant reductions in greenhouse gas emissions.

KEYWORDS: Renewable Energy Source, Energy Transition, Energy Policies, Energy Efficiency, Climate Goals, Sustainable Energy Technologies and Assessments

Introduction

The need for energy is increasing, as conventional sources are limited and unknown amounts of coal, gas and oil reserves are buried deep in the earth or under the ocean. Therefore, the identification of new sources becomes increasingly difficult and expensive, and exploitation is dangerous either because of accidents when drilling under the ocean floor or because of the need to burn large quantities of natural gas for refining, as we speak about oil sands. In addition, the use of nuclear fuels involves many risks that threaten both the health and safety of people and the environment. Human errors and colossal mechanical failures could generate huge costs and devastating effects on human health, killing thousands of people in the short term and tens of thousands in the long term, due to the radiation generated and large areas of radioactively contaminated land (Ernest & Young 2013). Moreover, global warming and energy crises have direct consequences on the quality of human life. Under these conditions, renewable energy sources are an option worthy of serious consideration by governments because they could be easily identified and explored without causing major accidents or hazardous situations affecting life on earth. Also, as technology and infrastructure improve, the energy produced will become cheaper and cheaper.

Despite the debates caused by the installation of costs in many countries, renewable sources are considered a key element in the European energy policy because they could cover a large part of the energy needs of the European Union. In addition, they help Europe maintain and defend its position as a global innovation leader by developing new technologies and generating employment opportunities. Renewable energies offer the member states of the European Union the opportunity to develop a competitive, reliable and sustainable energy sector, contributing to solving the most pressing energy problems and challenges facing the community - reducing countries' dependence on energy imports, especially fuel dependence fossils such as oil, coal and natural gas.

Types of energy used in the European Union

Different types of renewable energy are generally used to cover human energy requirements: electricity, heating, cooling and consumption in the transport sector. Currently, renewable energy sources - wind, hydropower and even biomass - are used to produce electricity, and their

share in electricity generation is expected to increase strongly in the future. Half of the final energy consumption in the European Union is used in the heating and cooling systems of homes. Although the potential of renewable energy sources such as biomass, solar and geothermal energy is enormous, they represent only about 12% of the generation capacity of this sector (Ernest & Young 2013).

The most important types of energy used in the EU are well known and we refer here to:

Electricity, which is produced from sources such as fossil fuels (and here we include coal, oil and gas), nuclear power, hydropower, wind, solar, geothermal and waste. If in 2011, fossil fuels represented 49% of EU electricity production, while renewable energy sources represented only 18%, a decade later renewable energy sources are approaching the equivalent of fossil fuels, representing 32% of production of EU electricity (Mapped: Europe's Biggest Sources of Electricity by Country 2023).

Thermal energy used mainly for heating buildings and domestic hot water, which is produced from sources such as fossil fuels, biomass, waste and geothermal energy. In the EU, heating buildings represent around 40% of final energy consumption.

Biofuels are used as an alternative to fossil fuels, especially for transport and for heating buildings, they represent, according to the previously cited source, approx. 5% of current EU consumption. Biofuels are produced from organic materials such as energy crops, food waste and wood. They have been encouraged in the EU through support policies for renewable energy and meeting targets for reducing greenhouse gas emissions.

Natural gas, mainly used for electricity production and heating of buildings, is considered a cleaner alternative to coal and oil. In 2023, natural gas accounted for around 20% of the EU's energy mix (Mapped: Europe's Biggest Sources of Electricity by Country 2023).

Nuclear energy, used in particular for the production of electricity, represents an important source of energy in the EU which represents a percentage of 25% of the current energy mix.

Renewable energy has become an important topic in recent decades in the context of global concerns about reducing greenhouse gas emissions and global warming. An energy source is considered renewable if it can be regenerated in a relatively short time without running out or producing greenhouse gas emissions. In this article, we will look at four main sources of renewable energy used in the European Union: solar energy, wind energy, hydropower and geothermal energy.

Solar energy is one of the most well-known sources of renewable energy. This is produced by the sun and can be captured by solar panels and transformed into electrical or thermal energy. Solar panels are the most popular devices for capturing solar energy, and they can be used in a variety of applications, from heating water to generating electricity. In the European Union, solar energy is mainly used to produce electricity, but it can also be used to heat water in homes and commercial buildings. The development and diversification of solar energy storage technologies is also an important direction to follow in order to be able to use this source effectively.

Wind energy is another important source of renewable energy, produced by the wind and which can be captured by wind turbines and converted into electricity. Wind turbines can be installed on land or in the sea, where the winds are stronger and more constant. In Europe, countries with a long and deep coastline, such as Denmark, Germany and the United Kingdom, have great potential for wind power generation. In recent years, wind turbine technology has improved significantly, and the production of electricity by this method has become more and more efficient.

Hydropower is produced by falling water and can be captured by hydraulic turbines and converted into electricity. Hydroelectric plants are usually installed on rivers and lakes, and the energy produced can be used efficiently to supply electricity to consumers. Hydropower can

also be used for irrigation and water supply purposes, but it is important to consider the impact on the environment and ecosystems when building hydropower plants.

Geothermal energy is one of the most promising sources of renewable energy that can be used in a variety of applications, from generating electricity to heating and cooling buildings. This type of energy relies on the Earth's natural heat, which is produced by radioactive reactions inside the planet. This heat can be captured through geothermal wells, which extract warm water or steam from underground layers and use it to generate electricity or for heating. There are two main types of geothermal technologies: those that use hot water and those that use steam. The technology of using hot water is more common and more accessible, and involves the capture of hot water from underground layers by means of geothermal wells, which can have varying depths, depending on the geological characteristics of the area. Hot water is pumped to the surface and used to heat buildings or generate electricity. If the water temperature is high enough, it can also be used to produce steam, which in turn can be used to produce electricity. The technology of using steam is more complex and involves the capture of steam from underground layers, which can have very high temperatures and pressures. The steam is captured through deep geothermal wells, which can reach several thousand meters in depth. The steam is then directed to geothermal turbines, which convert it into electricity. Steam technology is more expensive and requires large investments, but can provide higher returns than hot water technology.

Geothermal energy has many advantages over other renewable energy sources. It is a permanent and inexhaustible source of energy that does not produce greenhouse gas emissions and does not pollute air or water. Also, geothermal energy is available in almost every region of the world and can be used in various applications, from heating and cooling buildings to generating electricity. However, geothermal energy also presents some disadvantages and challenges. One of the main obstacles to using this energy source is the high initial costs of geothermal drilling and power generation facilities.

The European Union has taken important steps to promote the use of renewable energy in recent decades, and we will mention the latest directions of action of the EU in this field. First, the EU has set ambitious targets for reducing greenhouse gas emissions and promoting renewable energy. By 2030, the EU has set out to reduce greenhouse gas emissions by at least 40% from 1990 levels and reach a target of producing at least 32% of its energy from renewable sources. These goals are consistent with the 2015 Paris Agreement, which aims to limit global temperature increases to less than 2 degrees Celsius above pre-industrial levels.

The European Union has also developed a number of initiatives and programs to encourage the development of renewable energy. One of these is the Erasmus+ program which provides funding for projects that promote sustainability and sustainable development, including renewable energy projects. The EU has allocated significant funds for the research and development of renewable energy technologies through the Horizon 2020 programme.

The European Union has also taken steps to encourage the use of renewable energy at local level. The European Territorial Cooperation Program, also called Interreg, aims to promote cooperation between regions in different countries to encourage sustainable development and economic growth. This program has funded several renewable energy projects at the local level. In addition, the EU has adopted a number of directives and regulations to promote renewable energy and prevent the use of more polluting energy sources. The Renewable Energy Directive, adopted in 2018, sets targets for each member state regarding the percentage of renewable energy produced by 2030. The EU has also adopted regulations to promote the efficient use of energy and encourage investment in technologies of renewable energy.

In addition to these initiatives, the EU has also developed a number of partnerships to promote renewable energy beyond its borders, for example the Sustainable Energy Partnership with Africa, launched in 2018, aims to encourage renewable energy investment in Africa.

Romania's potential in terms of renewable energy

The commitment of the European Union to promote and support the transition to a cleaner and more sustainable energy system based on renewable sources is found in the clear and well-defined objectives it has proposed for the coming decades. In this sense, the European Union (2009) has established ambitious objectives established within the Renewable Energy Directive (Directive 2009/28/CE) and updated under the Renewable Energy Directive (Directive (EU) 2018/2001, European Union 2018). The main objectives of the EU in the field of renewable energy include the establishment of percentage shares of renewable energy - by 2030 - at least 32% of the gross final energy consumption will be covered by renewable sources; an objective of the percentage share of renewable energy in the transport sector was also set so that by 2030, a percentage of 14% of the energy used in transport should come from renewable sources. It adds the target of the percentage share of renewable energy in the field of heating and cooling which stipulates that by 2030, the EU aims for at least 1.5% of the final energy consumption for heating and cooling to be provided by renewable sources. However, in 2021 renewable energy accounted for 21.8% of energy consumed in the EU, down from 22.1% in 2020 (Eurostat, Statistics Explained 2023) due to the social context strongly marked by the global medical pandemic and the Russian-Ukrainian war. We can say that the year 2022 was the ultimate "shock therapy" for the use of renewable sources but the experience of learning and adapting to the market is the bright side of things. Becoming the world's first climate-neutral continent by 2050 is the goal behind the European Green Deal, COM(2019) 640 final (European Commission 2019), which is the very ambitious package of measures that should enable European citizens and businesses to benefit from a sustainable ecological transition. Aligning with the "Energy Policy for Europe", and Romania developed the Energy Strategy for the period 2018-2030 in line with the energy objectives of the European Union outlined in the "European Strategy for sustainable, competitive and secure energy".

Romania has a significant potential in terms of renewable energy, but the implementation of projects in this field has been long delayed. Unfortunately, the transition to a green economy has been slowed down by several factors, including the lack of coherent policies and a stable and predictable legislative framework. We will explore Romania's position in the transition to the implementation of renewable energy projects and what can be done to accelerate this process.

The primary objective of sustainable energy development is the promotion of energy production based on renewable resources. From a statistical point of view, we are doing very well in this chapter because we managed to reach the target of 24% renewable energy foreseen for 2020, since 2017, a large part of this success is due to the consumption of hydro energy. We must also mention that the production of renewable energy in Romania is significant, ranking the country in second place in the region, after Poland, and at a considerable distance from other European states (Romanian National Institute for the Study of the Development and Use of Energy Sources 2020).

According to Eurostat data, in 2019, renewable energy represented 29.4% of Romania's final gross energy consumption, with a significant increase compared to the previous year. Of this percentage, hydroelectric power accounts for the largest share, followed by wind and solar power. However, Romania's renewable energy potential has not yet been fully exploited. In its 2019 report on renewable energy, the European Commission highlighted that Romania still has a long way to go to meet its renewable energy targets by 2020 and to meet its long-term climate goals. Romania has set ambitious targets for renewable energy. In the National Energy Strategy for the period 2020-2030, Romania aims to increase the share of renewable energy in the energy mix to 30.7% by 2030. The country has also set the objective of reaching a share of 10% of the energy of road transport coming from renewable sources by 2020, and by 2030, this objective

is 14%. Thus, in order to achieve the level of ambition regarding the share of energy from renewable sources of 30.7% in 2030, Romania will develop additional SRE capacities of approximately 6.9 GW compared to 2015. In order to achieve this target, it is necessary to ensure financing appropriate from the EU in the sense of ensuring an appropriate adequacy of the electrical networks, but also the flexibility of the production of E-SRE by installing back-up capacities on natural gas, storage capacities and the use of intelligent techniques for the management of electrical networks. To meet these objectives, Romania has implemented a series of policies and measures regarding renewable energy. They include a number of tools to accelerate the development of the field.

The Casa Verde Photovoltaic Program is an important government program aimed at the promotion and development of solar energy in Romania. This program was launched in 2019 and aims to finance the installation of photovoltaic systems for the production of electricity at the level of households and small and medium-sized enterprises.

The support program for the development of renewable energy capacities (*Green Energy Program)* is an initiative of the Romanian Government, launched in 2016, with the aim of promoting and developing the production of electricity from renewable sources. Through this program, renewable energy project operators can obtain financial support in the form of a guaranteed preferential tariff for a period of 15 years, so that they can cover the investment costs and ensure a corresponding profit. Preferential tariffs are established for each type of renewable energy separately and are revised annually according to production costs and market developments. Renewable energy sources eligible under the Green Energy Program include solar energy, wind energy, hydroelectric energy, biomass and biogas energy, and geothermal energy. The Green Energy Program had a positive impact on the development of renewable energy capacities in Romania, contributing to attracting investments in this sector and increasing the production of electricity from renewable sources. In the first two phases of the program, which took place between 2016 and 2020, funds were allocated to more than 3,000 renewable energy projects with a total installed capacity of more than 5,000 MW.

Currently, the Green Energy Program is in the third stage of implementation, which will end in 2023. This stage aims to attract investments in renewable energy projects in the disadvantaged regions of Romania, so as to ensure a balanced development of electricity production from renewable sources throughout the country.

We can say that Romania has an important position regarding the transition to the implementation of renewable energy projects, benefiting from important natural resources and a favorable legislative and financial framework. The Green Energy Program played an important role in the promotion and development of this sector, contributing to the increase in the production of electricity from renewable sources and to the reduction of dependence on fossil energy sources. However, there are still many challenges to overcome, such as the improvement of renewable energy infrastructure and storage capacities, so as to ensure a more efficient and sustainable use of these clean energy sources.

In addition to the two programs mentioned, there are other initiatives that encourage the development of renewable energy. Thus, another important program is the High Efficiency Cogeneration Support Program (*Cogeneration Program 2016-2020*). This program was implemented by the National Energy Regulatory Authority (ANRE) and aims to support the production of electricity and heat through high-efficiency cogeneration. Cogeneration refers to the simultaneous production of electricity and heat, which leads to greater efficiency than if these two types of energy were produced separately. The high-efficiency cogeneration support program provides cogeneration certificates for units that meet the efficiency criteria established by ANRE. These certificates can be sold to electricity suppliers, which can generate additional income for power producers.

Consequently, the use of renewable energy in Romania's economy has been growing steadily in recent years, although still below the EU average. In 2020, the total electricity

production from renewable sources was 13.5 TWh, representing 18.6% of the total electricity production in Romania.

Hydro energy is the most important source of renewable energy in Romania, representing over 90% of the total electricity production from renewable sources. In 2020, hydro energy represented 16.9% of the total electricity production in Romania. This is due to the rich hydrological resources in the country, especially in the Carpathian area.

Wind and solar energy are important sources of renewable energy in Romania, but their production is still relatively small. A systematic inventory study of the theoretical wind potential for the entire national territory was carried out by ICEMENERG in 2006 and provided a potential value of about 23 TWh/year through the installation of capacities with a total power of about 14,000 MW. The wind potential determined in 2006 must be adjusted taking into account the subsequent establishment of Natura 2000 protected areas as well as flight paths for wild bird populations, elements that diminish the options for developing new projects in the Dobrogea region. In 2020, wind energy represented 1.5% of the total electricity production in Romania, and solar energy only 0.2%. However, there is significant potential for the development of these renewable energy sources in Romania, especially in regions with high wind or solar radiation potential (The Romanian National Institute for the Study of the Development and Use of Energy Sources 2020, 421). The construction of photovoltaic parks benefited from a support scheme in the period 2009-2016, according to Law 220/2008. The establishment of Natura 2000 protected areas, as well as the restriction of the development of photovoltaic parks on agricultural land surfaces, limits the options regarding the installation of new large photovoltaic parks only on degraded or unproductive land.

In addition, Romania has committed to meet its renewable energy targets set by the EU, which stipulates that 32% of gross final energy consumption should come from renewable sources by 2030. To achieve this target, a significant increase in the production of electricity from renewable sources, but also the use of renewable sources in other sectors, such as transport or heating.

In conclusion, the use of renewable energy in the Romanian economy is increasing but still below the EU average, and the Government has taken measures to support the development of renewable energy through financing programs and support schemes, but a continuous effort is needed to reach the objectives established in the field. For Romania, capitalizing on the potential of renewable energy sources aims to increase the security of energy supply, by diversifying sources and reducing the weight of the import of classical energy resources, with the aim of sustainable development of the energy sector, environmental protection and reducing dependence on the import of energy resources.

Adapting the economy to new energy sources

Regarding the promotion of investments and the development of infrastructure for renewable energy, the EU encourages Member States to take measures to support investments in renewable energy and the development of infrastructure necessary to facilitate the integration of renewable sources into the energy system and encourages the development and implementation of innovative energy technologies renewables, as well as their integration into sustainable energy solutions.

Around the world, developing countries are looking to rapidly scale up investment in renewable energy. This shift to renewable energy is driven by a number of considerations. Many developing countries are struggling to meet rapidly growing energy demand as rising global fuel prices and resource scarcity make them vulnerable to oil prices. At the same time, the cost of renewable energy technology has seen remarkably steady declines over the past few decades, nearly 98% for solar PV modules since 1979 (IRENA 2012). It has been suggested that a

technology push by a few pioneer countries could continue to drive down technology costs, allowing renewable energy to overtake fossil fuels by the end of this decade. However, the barriers to a large-scale transition to renewable energy in developing countries are not only in the costs of the technology, but in the challenges of securing affordable long-term financing. Financing cost is the primary determinant of generation cost for renewables, such as renewable energy (other than biomass and biofuel) has no fuel costs but has high initial investment costs. (Waissbein et al. 2013 - Derisking Renewable Energy Investment).

Policymakers can use a number of different tools to address the risks of renewable energy investments and their associated barriers, and certainly some types of tools have gained more prominence than others. Mechanisms that provide renewable energy suppliers with development, a power purchase contract, which ensures a long-term fixed price for the energy supplied and guaranteed access to the electricity grid, are considered the cornerstone of the tools for efforts to transform the renewable energy market. The severity of investment barriers in renewable energy varies between countries, technologies and banking systems. The European Union has adopted a series of financial instruments to facilitate the development of the field even in this special geo-economic context.

The renewable energy market in Europe has grown significantly in recent years, particularly due to targets and policies on reducing greenhouse gas emissions and the transition to a low-carbon economy. Many factors influence the outlook for the European renewable energy market, such as energy policy, financial support, technological innovations and the economic interests of member states. However, it is important to note that strategies and energy policies may vary according to each member state of the European Union.

The increase in the supply of renewable energy has major implications for technological transformations in various industrial branches. This transition to a green and sustainable economy involves a paradigm shift from an economy based on fossil fuels to one based on renewable energy sources such as solar energy, wind energy, hydropower and geothermal energy. The energy industry is one of the most affected by this transition. It must adapt its infrastructure and technology to be able to manage energy produced from renewable sources. For example, traditional power grids need to be upgraded to be able to handle more variable and distributed energy in a more efficient way. In addition, the development of energy storage technologies is essential to manage the energy fluctuations produced by renewable sources.

The automotive industry is also affected by the transition to a green economy. In recent years, the automotive industry has begun to focus more and more on electric and hybrid vehicles, which use electricity as a source of propulsion. This has led to the development of new technologies, such as high-performance batteries, which are able to store a larger amount of electricity. In addition, electric cars require a charging infrastructure that allows fast and easy charging of batteries.

The construction industry is also affected by the transition to renewable energy. Buildings must be built to be more energy efficient by using new technologies such as solar panels, geothermal and advanced thermal insulation. In addition, these buildings need to be connected to smart grids and energy storage systems in order to be managed efficiently.

In general, the increase in the supply of renewable energy brings with it a number of opportunities and challenges for different industries. Technology development and infrastructure adaptation are essential to be able to cope with the transition to a green and sustainable economy. At the same time, there are opportunities to develop new markets and create new jobs within the renewable industry. However, there are still many challenges to overcome in terms of the costs and infrastructure needed to enable an efficient and sustainable transition to renewable energy sources. The adaptation of Romania’s economy to the new sources of renewable energy is a complex process that involves both technological changes and changes in economic policies and infrastructure investments. In the coming years, renewable energy is expected to become an increasingly important part of Romania's energy mix, and

adapting the economy to this transition is essential to ensure sustainable development and a more competitive economy.

One of the main ways to adapt Romania's economy to renewable energy is through the development of clear and coherent energy policies. These policies should stimulate investment in renewable energy sources through fiscal measures, subsidies and other financial instruments. In addition, it is important to have a robust and predictable legislative framework to ensure the safety of investments in renewable energy and protect the interests of investors. Significant investment in infrastructure is also required to support the transition to renewable energy. This includes the development of electricity distribution networks as well as the necessary infrastructure for energy storage, such as batteries or other storage technologies.

Investments in smart grids and energy monitoring and control technologies are also essential to ensure efficient and secure distribution of renewable energy.

On the other hand, adapting the economy to renewable energy will also bring with it significant opportunities for the development of new economic sectors. This will create new jobs and boost economic growth in innovative sectors such as green technology and the development of new renewable energy technologies. In addition, the transition to renewable energy will have a positive impact on the environment, reducing greenhouse gas emissions and other pollution affecting air and water quality.

In conclusion, adapting Romania's economy to renewable energy is an essential process to ensure sustainable development and a more competitive economy in the future. This will involve significant investment in infrastructure and clear energy policies to boost investment in renewable energy sources and protect investors' interests. In addition, the transition to renewable energy will bring with it significant opportunities for development. In this sense, Romania has developed a series of programs and strategies to adapt to new sources of renewable energy. In 2015, the Romanian government adopted Romania's Energy Strategy for the period 2015-2035, whose main objective is to increase the share of renewable energy in the energy mix and reduce greenhouse gas emissions. This strategy was updated in 2019, in line with the European Union's objectives of reducing greenhouse gas emissions by at least 40% by 2030.

In addition to support programs, adaptation to new renewable energy sources also required significant investments in infrastructure and electricity distribution networks. In this sense, Romania received European funding through the European Regional Development Fund (ERDF) for the development of renewable energy infrastructure and the modernization of electricity distribution networks.

Also, companies from different industrial sectors had to adapt to the new sources of renewable energy by developing innovative technologies and solutions. For example, in the telecommunications equipment manufacturing industry, solar power solutions have been developed for base stations, which provide an independent and environmentally friendly power source. In the automotive industry, the development of renewable energy storage technologies has led to the development of new products and services. For example, charging systems have been developed for electric cars, which use solar or wind energy to power the cars. These solutions have helped to increase interest in electric cars and develop a complete ecosystem of charging infrastructure.

Conclusion

The use of renewable energy has many potential benefits, including a reduction in greenhouse gas emissions, diversification of energy supplies, and reduced reliance on fossil fuel markets (especially oil and gas). Increasing renewable energy sources can also boost employment in the EU by creating jobs in new "green" technologies. Romania has significant potential in renewable energy, especially in wind and solar energy, due to abundant natural resources. The

wind sector has seen significant growth in recent years, while solar energy benefits from a favorable climate and a generous number of sunshine hours. Also, hydroelectric energy represents an important source in the country, with possibilities for the development of micro hydropower plants and the modernization of existing hydropower plants. The exploitation of these resources can contribute to the achievement of the EU's renewable energy objectives and bring significant economic and environmental benefits to Romania.

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The Effects of the Romanian Constitutional Court Decisions in the Extradition Proceedings between Romania and the United States of America

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ABSTRACT: The Romanian Constitution states in Article 147 that: "(1) The provisions of laws and ordinances in force, as well as those of regulations, found to be unconstitutional, shall cease to have legal effect 45 days after the publication of the decision of the Constitutional Court if, within this period, the Parliament or the Government, as the case may be, do not bring the unconstitutional provisions into line with the provisions of the Constitution. During this period, the provisions found to be unconstitutional shall be automatically suspended." It follows that, in principle, the effects of these decisions are for the future, and within the period expressly provided for by the constitutional rule (45 days), the legislator is obliged to amend the legal provisions (provisions) declared unconstitutional, but also that during this period these provisions are suspended by law, i.e., they can no longer be applied. The phrase "for the future" also means that the decisions of the Constitutional Court apply to pending and final cases, as well as to any other future situations. The Constitutional Court itself, in its Decision no. 454/4 July 2018, has specified in recital 63 the effects of its decisions: "... unconstitutionality is a sanction of constitutional law that applies immediately to pending situations." If an exception of unconstitutionality concerns a provision of the Framework Law on international judicial cooperation, namely Law No 302 of 2004 (republished in 2022), it is in the field of international judicial cooperation, a procedure governed by the Extradition Treaty between Romania and the United States of America, signed in Bucharest on September 10, 2007, and by the Framework Law, as a special law governing all international judicial cooperation in criminal matters, which is supplemented by the provisions of the Code of Criminal Procedure.

KEYWORDS: international judicial cooperation, extradition, exception of unconstitutionality, obligation to respect decisions of the Constitutional Court, duration of arrest in extradition proceedings, respect for the rights of the extraditable person, judicial practice

1. Introduction

First of all, it should be noted that the institution of extradition, as a procedure which is specific to the field of international judicial cooperation, is not intended to prejudice the merits of the criminal proceedings brought against the extraditable person by the requesting State, nor an assessment of the judgment of conviction where extradition is requested for the purpose of enforcing a sentence which has been definitively imposed, nor does it constitute an anticipation of a sentence, as this measure is ordered following the commencement of criminal proceedings against the extraditable person and not as a result of the removal of the presumption of innocence. If the extraditable person has been definitively convicted, the presumption of innocence has been removed, but even in this case ,there are procedural safeguards, which we will examine below.

Obviously, any person subject to the law has the right to invoke a plea of unconstitutionality in the course of the procedure if he or she considers that the legal provisions applicable in the case in question are contrary to the fundamental law of the State, including in the extradition procedure, and there have been many such cases.

What is relevant for the present scientific approach is the situation in which this exception of unconstitutionality concerns the Framework Law on International Judicial Cooperation and/or the provisions of the Extradition Treaty between Romania and the United States of America, signed in Bucharest on September 10, 2007, published in the Official Gazette of Romania, Part I, no. 387 of May 21, 2008.

Consequently, where the exception of unconstitutionality has been upheld, the courts are obliged to apply that decision and comply with the Court's order. The judgments delivered by the Constitutional Court are binding on the institutions concerned, which are under an obligation to put an end to the infringement found and to remedy the consequences of that infringement, in the sense of taking measures in its legal order, such as legislative amendments, to put an end to that infringement and to remedy all the effects of that infringement.

2. Use of the term 'offender' in the Extradition Treaty between Romania and the United States of America; application of the Treaty to offences committed before its entry into force

During 2012, an extraditable person raised an exception of unconstitutionality concerning the use of the phrase "treaty for the extradition of criminals" in the introductory part of Law no. 111/2008 ratifying the above-mentioned bilateral treaty. It was found in the decision of the Constitutional Court that the author of the exception claimed that the phrase "treaty for the extradition of criminals" in its preamble violates the constitutional provisions of Article 23 para. (11) on the presumption of innocence and Article 11 para. (3) according to which, "If a treaty to which Romania is to become a party contains provisions contrary to the Constitution, it may be ratified only after the Constitution has been revised". In this regard, the author of the exception argued that the provisions of the law at issue "are contrary to the presumption of innocence enjoyed by any person involved in criminal proceedings, as long as that person has not been convicted by a final judgment. Given that the purpose of the treaty is the extradition of offenders, a category which, under the terms of the treaty, also includes those who are prosecuted, such a qualification is a real denial of the principle enshrined in Article 23(2) of the EC Treaty. (11) of the Constitution. He also argued that the provisions of Article 22 of the Extradition Treaty between Romania and the United States of America were contrary to the constitutional provisions of Article 11(11) of the Constitution. (2), according to which "Treaties ratified by the Parliament, according to law, are part of domestic law", Art. 15 para. (2) on the principle of non-retroactivity of the law, Article 19 on extradition and Article 78 on the entry into force of the law, since the extradition treaty also applies to offences committed before its entry into force."

The Constitutional Court found that "the use in the preamble to the Treaty of the term 'offender' does not have the meaning of rebutting the presumption of innocence enshrined in Article 23(2) of the Treaty. (11) of the Constitution, but serves to circumscribe the subject matter of the treaty, expressing the concern of the two signatory States to combat the phenomenon of crime, which has experienced a particular intensification at international level, especially a certain offensive of organized crime. Extradition is an act of inter-State judicial assistance in criminal matters aimed at transferring a person prosecuted or convicted of a criminal offence from the sphere of judicial sovereignty of one State to the sphere of another State."

It was also found that the application of the provisions of the Treaty to offences committed before its entry into force does not amount to a rebuttal of the presumption of innocence and does not contravene the principle of non-retroactivity of the law laid down in Article 15(1) of the Treaty. (2) of the Constitution, on the ground that "it applies to extradition proceedings in respect of which extradition requests were submitted to the courts of the requested State after the date of its entry into force. However, the procedural rules are of immediate application and the time of the commission of the offence is irrelevant".

3. The concept of "provisional arrest for a purpose to extradition". Sui-generis concept?

3.1. Presentation of the facts and procedure in the extradition requested by the United States of America

We would like to point out that the same case has been the subject of another study by the authors, but from the point of view of the interference and effects of the decisions handed down by the European Court of Human Rights, since the extraditable persons have decided to use all the legal means at their disposal. According to Article 39 of the Rules of Procedure of the Court, the applicants should not be removed from the territory of Romania, i.e. not be extradited, as a provisional measure. In essence, the Department of Justice requested by "verbally note during 2021 the extradition of three persons, one a Romanian citizen and the other two persons having different foreign citizenship, for trial in the United States of America for the following facts:

Count 1: Conspiracy to commit racketeering in violation of Title 18, United States Code, Section 1962(d), which carries a maximum penalty of life imprisonment;

Count 2: Conspiracy to import and export cocaine and to manufacture and distribute cocaine with the intent, and knowing, and having reason to believe that such cocaine will be imported into the United States, in violation of the provisions of Title 18, United States Code, Sections 960(b)(1)(B) and 963, which provide for a maximum penalty of life imprisonment; and

Count 3: Conspiracy to commit money laundering in violation of the provisions of Title 18, United States Code, Sections 1956(a)(2)(A) and 1956(h), which provide for a maximum penalty of 20 years imprisonment.

The indictment issued by the U.S. Marshals Service revealed that the individuals requested and others known and unknown to the Grand Jury were members and associates of the H.A. Club. Motorcycle Club or "HAMC" a transnational outlaw motorcycle gang whose members and associates engage in criminal activity, including drug trafficking, money laundering, illegal arms trafficking, and acts of violence, including murder. During the same period, members of the organization operated throughout the United States, including in the Eastern District of State X as well as in other countries," following a detailed description of their alleged crimes.

The Bucharest Court of Appeal, Criminal Division I, decided in separate criminal judgments to grant the extradition request made by the United States Department of Justice and ordered the extradition and surrender to the requesting judicial authorities of the three persons. The criminal judgments of the Bucharest Court of Appeal became final with the dismissal by the High Court of Cassation and Justice of the appeals lodged by the extraditable persons as unfounded.

3.2. Arguments and procedure before the Constitutional Court

In this case before the Constitutional Court, which is totally atypical and unprecedented in the history of extradition cases between Romania and the United States of America, as well as between Romania and any other third country or member state of the Council of Europe, an exception of unconstitutionality of Article 52 para. (3) and Article 57 para. (5) and (6) of Law 302/2004 on international judicial cooperation in criminal matters. The authors of the exception of unconstitutionality argued that: "the notion of "provisional arrest for extradition purposes" is not defined by the provisions of the Framework Law or those of the Code of Criminal Procedure, as there is no provision for any duration for which this measure may be ordered, being a sui generis notion... according to the case-law of the European Court of Human Rights, it is essential that the conditions for deprivation of liberty be clearly defined under national law and that the law itself be foreseeable in its application in order to meet the criterion of legality laid down by the Convention for the Protection of Human Rights and Fundamental Freedoms. The elements to be taken into account when assessing the "quality of the law" include, in particular, the existence of clear legal provisions on the ordering of detention, the maintenance of that measure and the determination of its duration, and the existence of an effective remedy by which the applicant can

challenge the lawfulness and duration of detention. It points out that no deprivation of liberty must be arbitrary and must also respect the principle of proportionality. In conclusion, the absence of a definition or criteria for determining the content of the measure of 'provisional arrest for the purpose of extradition', its legal regime, and the absence of concrete criteria for the revocation, replacement or de jure termination of the measure are the equivalent of a lack of foreseeability of the law, with the consequence of a breach of the guarantees of individual liberty laid down in Article 23 of the Constitution."

With regard to the claim that the concept of 'provisional arrest for the purpose of extradition' is not defined by the provisions of the Framework Law or those of the Code of Criminal Procedure, the Constitutional Court held that: "a legal provision must be precise, unequivocal, establish clearly defined, predictable and accessible rules, the application of which does not allow arbitrariness or abuse. The legal rule must regulate in a unitary, uniform manner, and lay down minimum requirements applicable to all its addressees".

Considering the lack of a definition of the concept of "provisional arrest for the purpose of extradition", both in the Framework Law and in the Code of Criminal Procedure, in the context of the review of constitutional compliance, the Court stated in the recitals to the decision under consideration that the concept in question has a "meaning specific to the subject-matter under consideration, which indicates the Legislature's intention to attribute to it, in the context of the regulation of the extradition procedure, the meaning resulting from the common meaning of the concepts of which it is composed" .

The Court did not accept the allegation of the authors of the exception of unconstitutionality that this concept is a sui-generis notion, because, "according to the Explanatory Dictionary of the Romanian Language, the word "arrest" means "detention under legal custody of a person"; the word 'provisional' means 'which lasts or is intended to last for a limited time, after which it is to be replaced; temporary, ephemeral, transitory'; the prepositional phrase in view of' means 'for the purpose of'; the word 'extradite' means 'to hand over someone who has been prosecuted or convicted to another State, upon request, under the conditions laid down in international conventions'. In this context, the Court recalled that, both under the Constitution and the case-law of the Constitutional Court and under the Convention for the Protection of Human Rights and Fundamental Freedoms and the jurisprudence of the European Court of Human Rights, the arrest of a person for the purpose of extradition constitutes a deprivation of liberty. At the same time, the provisions of Article 18 of the Framework Law regulate the persons subject to extradition and Article 19 of the same normative act regulates the persons exempted from extradition. Thus, the Court held that "the generally accepted meaning of the term 'provisional arrest for extradition' is "temporary deprivation of liberty of a person who is the subject of extradition proceedings".

It should also be noted that the authors of the objection of unconstitutionality have formulated criticisms which have taken into account the rules of legislative technique, as well as those relating to the criminal policy of the State, to the effect that the extradition procedure should be regulated by the Code of Criminal Procedure, which is neither possible nor appropriate, given the specificity and essence of international judicial cooperation, as is shown by the taxonomy of rules governing this specific field. The concept of sui generis was originally a particular term used in Roman law to describe a legal situation whose singularity made it impossible to classify it in an existing category, necessitating the creation of specific texts. However, extradition and the concepts associated with it, including provisional arrest on an emergency basis or for the purpose of extradition, are not sui-generis concepts, but have long been regulated in all legal systems, and are not a singular institution that could not be placed in an existing category.

Moreover, it is not a preventive measure that should be included in the category of those provided for by the Code of Criminal Procedure, in the chapter on preventive measures, because the legislator has taken into account their different legal nature, being preventive measures that can be taken in the course of the execution of requests for international judicial cooperation, which are issued and executed on the basis of international, bi or multilateral treaties, conventions,

whether universal or regional (for example, the United Nations Convention against Transnational Organized Crime, Palermo 2000 or the United Nations Convention against Corruption, Mérida 2003, the 1957 European Convention on Extradition of Paris) or which are of an inter-State nature (for example, the 2007 Treaty between Romania and the United States of America on Extradition, applicable in the present case), the provisions of which are supplemented, in accordance with the role of the supplementary rules, in the special law on international judicial cooperation in criminal matters.

The reasoning of the Romanian Legislator, similar to that of the Legislator of other States (Member States or third countries), was to avoid situations in which the execution of such requests would become impossible due to differences in the legal systems of the States. At the same time, given that this procedure does not deal with the offence which is the subject of the criminal proceedings, but with a request for international judicial cooperation, which has the special nature of the procedure provided for in Title II of the Framework Law, the Legislator has sought to ensure that the procedure is expedited and that a final judgment is obtained quickly, so that the judicial control of the decision can be exercised, in accordance with the positive obligations established by the European Convention on Human Rights and Fundamental Freedoms. Thus, the constitutional review found that the wording used complies with the standards of quality of the law required by Article 1(1)(b) of the Constitution. (5) of the Constitution, the meaning of which can be determined by the addressees of the legal rule under criticism.

4. Ending of provisional arrest with a view to extradition. Revocation or replacement of provisional arrest in extradition proceedings

4.1. Legal nature of provisional arrest for the purpose to extradition

Another criticism of unconstitutionality concerned the lack of safeguards against arbitrariness in relation to the measure of provisional arrest for extradition and the impossibility of applying less intrusive measures than detention.

In that light, the Constitutional Court held that deprivation of liberty in extradition proceedings subsequent to the decision granting the request for cooperation whereby extradition was granted and the person was ordered to be surrendered to the requesting State, in the light of the European Convention on Human Rights and Fundamental Freedoms, does not require such detention to be reasonably necessary, but "will only be justified if the expulsion or extradition proceedings are ongoing". To the extent that "such proceedings are not conducted with special diligence, the detention ceases to be justified under this rule".

Consequently, the Court also noted that when the extradition decision is handed down, the court will automatically order either continued provisional arrest for the purpose of extradition or arrest for surrender, the purpose of the measure in both cases being to enforce the decision handed down by surrendering the extradited person to the requesting State.

Regarding the duration of deprivation of liberty at this stage of the extradition procedure, the Court observed that "although the legislator has not expressly provided for a maximum duration, it can be determined by adding together the periods laid down by the Legislator in the provisions of Articles 52, 53 and 56 of Law No 302/2004. At the same time, given that the purpose of deprivation of liberty at this stage of the extradition procedure is to enforce the judgment by surrendering the extradited person to the requesting State, the Court observes that the conditions laid down in Article 5(1) (f) of the Convention are satisfied, in order for detention not to be classified as arbitrary and considers that the Legislature's choice not to lay down an obligation for periodic review of the custodial pre-trial detention measure and the possibility of replacing that measure with another measure is justified."

4.2. Occurrence of a case of force majeure making it impossible to surrender/take back the extradited person

The hypothesis in question, governed by the provisions of Article 57 para. (5) and (6) of the Framework Law, criticized in the constitutionality objection, is an integral part of the body of legislation governing that stage of the procedure which intervenes following the occurrence of a case of force majeure which makes it impossible to hand over/take back the extradited person, a situation which determines the maintaining of the measure of provisional detention for an indefinite period.

With regard to this hypothesis, the Constitutional Court held that "the rule is that if the extradited person is not picked up on the date set, he or she may be released on expiry of a period of 15 days, calculated from that date, which may be extended by a maximum of 15 days. Thus, the measure of arrest for surrender shall automatically cease if the extradited person is not taken back by the competent authorities of the requesting State within 30 days of the date initially agreed for surrender. The Court observes that this conclusion follows from a combination of the provisions of Article 43(7) and Article 57(5) of the Framework Law. In this case, the court orders the immediate release of the extradited person and informs the Ministry of Justice and the International Police Cooperation Centre of the General Inspectorate of the Romanian Police."

Consequently, the Constitutional Court found that "the legislature has provided for the de jure cessation of the measure of deprivation of liberty taken in respect of the extradited person, with the consequence that the person is released on the expiry of a period of not more than 30 days calculated from the date fixed for surrender between the requested State and the requesting State. In other words, at this stage the extradited person may only be held in custody for a maximum of 30 days."

As regards the notion of "force majeure", the Constitutional Court ruled that "it is not defined by Law No 302/2004, as there is no regulation of this kind either in the Code of Criminal Procedure or in the Criminal Code. Instead, the Court notes that, according to Article 1.351 para. (2) of the Civil Code, "force majeure is any external, unforeseeable, absolutely invincible and unavoidable event". At the same time, other acts of law provide, in the context of the subject-matter which governs it, that force majeure means an unforeseeable, unavoidable and insurmountable event which makes it temporarily or definitively impossible to fulfil/perform, in whole or in part, certain obligations/operations. [...] Also, in order to determine the scope of the notion of "force majeure" in a given matter, the legislator has linked the existence of these cases to strictly determined events. For example, according to Article 2(j) of Government Emergency Ordinance no. 21/2004 on the National Emergency Management System, are indicated as types of risk "cases of force majeure caused by fires, earthquakes, floods, accidents, explosions, damage, landslides or collapses, mass illness, collapse of buildings, installations or developments, grounding or sinking of ships, falling objects from the atmosphere or the cosmos, tornadoes, avalanches, failure of public utilities and other natural disasters, major disasters or large-scale public events caused or contributed to by specific risk factors; strikes cannot be considered as a type of risk under the terms of this Emergency Ordinance". [...] In the literature, with reference to the Civil Code regulation, it has been stated that force majeure is an external natural phenomenon of an extraordinary, unforeseeable and unremovable nature, which objectively and without fault prevents a person from acting as he would have wished in order to prevent damage. The characteristics of force majeure events must be: external to the injurer, unforeseeable, absolutely invincible and unavoidable. [...] As regards the extradition procedure, the Court considers that a case of force majeure is an event which is beyond the control of the authorities of the requesting or requested State, which cannot be foreseen by them and the occurrence of which cannot be avoided or overcome, so that its effects cannot be limited, even if the authorities concerned have done their utmost. At the same time, the Court holds that there must be a causal link between the occurrence/production of the effects of force majeure and the impossibility of surrendering/taking back the extradited person on the date agreed between the requested State and the requesting

State. [...] Once the surrender/return of the extradited person to the requesting State is impeded as a result of the occurrence of force majeure, that person shall remain deprived of liberty for an indefinite period of time. [...] The Court observes that, although the purpose of the deprivation of liberty remains the same in this case, namely the enforcement of the extradition decision, the application of the measure at this stage of the extradition procedure will be for an unlimited period of time and in the absence of a clear and predictable procedure. The mere existence of that purpose cannot, in itself, constitute sufficient grounds for maintaining indefinite deprivation of liberty. That is because, although it is sufficient for a deprivation of liberty to be ordered that an extradition procedure is in progress, other conditions must be satisfied in order for it not to be arbitrary. [...] The Constitutional Court has ruled that an interference with the right to individual liberty is not proportionate to the cause which gave rise to it, and does not strike a fair balance between the public interest and the individual interest, when it can be ordered for an unlimited period of time. The principle of proportionality, as governed by the specific case of Article 53 of the Constitution, requires that restrictions on the exercise of fundamental rights or freedoms must be exceptional, which necessarily implies that they must also be temporary. The Court found that the right of the judicial authorities to order certain preventive measures for unlimited periods of time, a right which entails a temporary unlimited restriction of the fundamental rights and freedoms covered by the content of that measure, is contrary to the standards of constitutionality. Such a restriction is unconstitutional, since the principle of proportionality affects the normative content of the fundamental rights concerned, and thus their substance, and is not limited to restricting the exercise of those rights." [...]The Court finds that, at present, the law does not regulate a procedure applicable to the analysis of the measure of deprivation of liberty under which the extradited person is held, where the person could not be surrendered because of force majeure, thus leaving room for arbitrariness. The Court considers that the absence of clear and foreseeable rules on the deprivation of liberty of an extradited person, whose surrender on the date agreed between the requested State and the requesting State was not affected because of the occurrence of a case of force majeure, is a prerequisite for arbitrary/random interpretations and applications of the legal provisions, with the consequence that the very measure restricting the exercise of individual liberty is arbitrary."

Accordingly, the Constitutional Court declared that the phrase "subject to the case provided for in para. (6)" contained in Art. 57 para. (5) of Law No 302/2004 on international judicial cooperation in criminal matters and the provisions of Art. 57 para. (6) of the same act are unconstitutional.

Following this decision, the Romanian legislator has decided to comply with this provision, given that the decisions handed down by the Constitutional Court are mandatory by law, as stated at the beginning of this study, and failure to comply with them by the courts, for example, is evidence of bad faith or serious negligence in the application of the law, which may lead to disciplinary liability of the judge.

Therefore, the new wording of Article 57(5) (6) of the Framework Law is: "(5) If the extradited person is not taken back on the date set, he or she may be released on the expiry of a period of 15 days, calculated from that date; this period may be extended by no more than 15 days.

(6) By way of exception to the provisions of paragraph (5), in case of force majeure preventing the surrender or reception of the extradited person, the Romanian authorities and those of the requesting State shall agree on a new surrender date, but the duration of the total provisional detention until the date of surrender may not exceed 180 days."

Consequently, the text of the special law has become similar to the provision in the Code of Criminal Procedure on the maximum duration of the person's detention during criminal proceedings.

Conclusions

Without intending to criticize the decision of the Constitutional Court, we limit ourselves to observing that, in our opinion, the text under criticism contained a clear, precise, foreseeable and predictable rule, in close accordance with the principles of legality and judicial security, bearing in mind that once the extradition decision has become final, surrender must take place as soon as possible, this is the essence of international judicial cooperation. In this process, the court does not rule on the guilt or innocence of the person involved, since the presumption of innocence is also respected in this procedure, but decides on a request for cooperation in accordance with the specific principles of the matter, namely that of loyal cooperation and mutual trust established by the Treaty. The period of arrest with a view to surrender may not be extended indefinitely, but it must be established that the measure of arrest is de jure ended if the extradited person is not taken over by the competent authorities of the requested State.

In addition, the rules of legislative technique for the drafting of legislation provides that the legislative solutions envisaged must be flexible and rigorous in order to combine the stability of regulation with the forward-looking requirements of social development. Moreover, there is nothing to prevent the person concerned from making applications to replace the provisional detention measure, relatively similar to the habeas corpus procedure, and the court from deciding on them. As we have pointed out, we do not intend to criticize the Constitutional Court's solution, however, it is essential to acknowledge, as legal practitioners and theorists, that in the specific field of international judicial cooperation, the assessment that the provisional arrest measure is arbitrary could be such as to weaken the credibility and legitimacy of the solution adopted in view of the specific requirements of international judicial cooperation which, in the context of the pandemic, has experienced shortcomings both in terms of communication and, above all, in terms of organising the transport and escort of extraditable persons.

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Theoretical Considerations Regarding the Know-How Contract from the Perspective of the European Union Legislation and the Romanian Transposition Legislation

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ABSTRACT: The investment made in generating and applying intellectual capital is a determining factor in terms of competitiveness and performance related to innovation, regardless of whether we consider a cross-border or a national market. In most cases, marketers resort to different means to appropriate the results of their own innovation activities. One of these means is the use of intellectual property rights, such as patents, design rights or copyright. Another means of protecting innovation results is to protect access to information that has some value to an entity and is not widely known. In the context of Union law, mentioning in this regard Directive (EU) 2016/943 on the protection of know-how and undisclosed business information (trade secrets) know-how and valuable undisclosed business information which is intended to remain confidential are called trade secrets. In the context of an increasingly dynamic and technological Union and international market, trade secrets, characterized by the fact that they go beyond the framework of technological knowledge and include commercial data, such as customer and supplier information, business plans and studies and strategies market, are as important as patents and other forms of intellectual property rights. The issue of commercial secrecy is regulated in Romanian legislation under OG 25/2019 on the protection of know-how and undisclosed business information that constitutes secrets. Therefore, this research aims to address the issue of commercial secrecy as a variation of the know-how from the EU and Romanian legislative perspective of transposition.
KEYWORDS: trade secret, technical procedures, trade secret holder, infringer

Introductory aspects regarding the legal framework, the concept and the nature of know-how

The best-known international instruments regarding the know-how contract are those developed by the Economic Commission for Europe within the Paris International Chamber of Commerce. In this sense, in the Report on the protection of industrial property drawn up on October 17-18, 1957, the Economic Commission for Europe defined know-how as "the set of notions, knowledge and experience, of operations, activities and processes necessary for the manufacturing of a product..." At the level of the European Union, the term know-how was defined for the first time in the framework of art. 1 paragraph (2) of Regulation (EEC) no. 4087/88 of the Commission of November 30, 1988 regarding the application of art. 85 paragraph (3) of the treaty to the categories of franchise contracts, as representing (f) "a non-patented package of non-patented practical information, resulting from the franchisor's experience and testing which is secret, substantial and identified;" (g) "secret - means that the know-how, as a whole or in a precise configuration or assembly of its components, is not readily accessible or generally known; is not limited in the strict sense that each individual component of the know-how should be totally unknown or unobtainable outside the franchisor's business"; (h) "substantial- means that the know-how includes information that is important for the sale of goods or the provision of services to end users, and in particular for the presentation of goods for sale, the processing of goods related to the provision of services, methods of approach to customers and financial and administrative management. The know-how must be useful to the franchisee through his ability to consolidate his position against the competition" (i) "identified- means that the know-how must be described to a sufficiently comprehensive extent to make it is possible to verify the fulfilment of the confidentiality and substantiality criteria".

From a national legislative perspective, we must mention that the know-how contract does not benefit from an express regulation, so that in its absence, the notion of know-how is defined in the content of art. 1 lit. d) from O.G. no. 52/1997 regarding the legal regime of the franchise, as "the set of formulas, technical definitions, documents, drawings and models, networks, processes and other similar elements, which serve to manufacture and sell a product."

In the Romanian specialized literature, the know-how contract was defined as "that contract by which one of the parties, called the supplier, transmits to the other party, called the beneficiary, for a price, the knowledge or technical procedures he/she possesses, unpatented or unpatentable, necessary for the manufacture or sale of goods, for the provision of a certain service or for the development and implementation of techniques or procedures unknown until that date by the beneficiary of the transfer" (see in this regard Belu-Magdo 2010, 7). Also, a definition retained in the specialized literature qualifies Know-how as representing "the set of formulas, technical definitions, documents, drawings and models, recipes, procedures, other similar elements, which serve to manufacture and sell a product" (see in this sense Mocanu 2019, 8). In a more simplified sense, the know-how contract was defined as "...the operation of transmitting from the supplier to the beneficiary some technical knowledge, some information and documentation including some complex processes and technologies, according to the terms and the conditions agreed by the parties" (See for additional information Mazilu 2003, 203).

The legal characteristics of the know-how contract

The know-how contract (the birth of a legal relationship presupposes the existence of a legal fact *lato sensu* (events and human actions - legal acts and facts) and the bilateral contact is part of the category of legal acts that represent the manifestation of a rational and conscious free will, with the aim of producing effects legal, i.e., the creation and extinguishment of certain rights and obligations, as a result of their regulation by the legal norm. See Bădescu 2002, 283-284; Niemesch 2019, 203; Boghirnea 2023, 225-226) is a *commercial, consensual, onerous, commutative and synalagmatic contract.*

The *intuitu persoane* (personal) character of the know-how contract is explained by the fact that it is concluded taking into account the personal qualities of the two contracting parties - assignor/supplier and transferee/beneficiary. Specifically, from the point of view of the transferor supplier, the personal nature of the contract is analyzed according to the possibility of the transferee beneficiary to keep the secret (confidentiality) of the object of the know-how, to effectively realize the know-how, while from the perspective of the assignee/beneficiary, the personal nature of the contract is related to the know-how that the assignor can offer.

The legal nature of the know-how contract

With regard to the legal nature of the know-how contract, it is necessary to specify that, based on the content and purpose, the know-how contract differs from the franchise contract.

Specifically, the know-how contract has as its object the transmission of a set of knowledge by the supplier and the payment of the price by the beneficiary, without the latter having the obligation to develop the know-how unless it is expressly provided for in the contract in this regard. In the hypothesis in which we are in the presence of an assumption on the part of the beneficiary of the obligation to develop know-how, this will be fulfilled under its own brand.

The franchise contract has the same object as the know-how contract, namely the transmission of know-how and the payment of a royalty, but, unlike this, in the franchise contract, the franchisee has the obligation to exploit or to exploit and develop the object of the

franchise under the franchisor's brand and to benefit from the technical assistance provided by him (see in this sense Mocanu 2008).

Also, the beneficiary of the know-how acquires the set of knowledge as found at the time of the conclusion of the contract, without the obligation of any of the parties to communicate to the other contracting party any improvements made to the concept.

In the case of the franchise contract, the franchisor has the obligation to communicate to the franchisee the improvements brought to the know-how after its transmission, throughout the duration of the execution of the contract.

Last but not least, taking as a criterion the goal pursued by the contracting parties, we make it clear that, in the case of the know-how contract, the final goal consists in its transmission, while in the franchise contract, the communication of know-how only represents a means by which the object of the contract is achieved.

The analogy between know-how and manufacturing secret

Analyzing the same two criteria, object and finality, the know-how contract differs from the manufacturing secret. Thus, while the know-how incorporates in its content, in addition to the patented or patentable technological processes to be applied, but also the techniques in the stage of experiences, and the ability ("Skill represents *technical dexterity*, i.e., general ability due to natural aptitude...and specialist acquired dexterity...which augments innate dexterity. The ability having a personal character and being specific to a person, cannot be transmitted independently of the person". See in this sense, Belu-Magdo 2010, 8-9) and experience ("Technical experience means knowledge acquired by the technician during a long industrial practice and which involves the prompt, efficient and correct solution of problems encountered in practice. The transfer of technical experience is carried out through technical assistance, training and specialization of the beneficiary's staff". See in this sense, Belu-Magdo 2010, 9) of the supplier, these two elements are not found in the manufacturing secret.

Protection of know-how and undisclosed business information (trade secrets) against illegal acquisition, use and disclosure, in the sense of Directive (EU) 2016/943 respectively OG no. 25/2019 (transposition norm)

Research and development in cross-border networks, as well as innovation-related activities, including production and cross-border trade arising from them, are becoming less attractive and more difficult within the European Union, given the existence of differences in the legal protection of trade secrets, respectively of know-how and undisclosed business information provided by member states.

In such a reality, there is an increased risk for business activities in Member States with comparatively lower levels of protection, due to the fact that trade secrets can be more easily obtained illegally. From this perspective, the European Parliament and the Council adopted on June 8, 2016, Directive (EU) 2016/943 (Directive (EU) 2016/943 of the European Parliament and of the Council of 8 June 2016 on the protection of know-how and undisclosed business information (trade secrets) against illegal acquisition, use and disclosure, OJ L 157, 15.6.2016, pp. 1-18) on the protection of know-how and undisclosed business information (trade secrets) against illegal acquisition, use and disclosure. The union provision was transposed in Romania by Government Ordinance no. 25/2019 (Government Ordinance no. 25 of April 18, 2019 regarding the protection of know-how and undisclosed business information that constitute trade secrets against illegal acquisition, use and disclosure, as well as for the modification and completion of some normative acts, published in the Official Gazette no. 309 of April 19, 2019) on the protection of know-how and undisclosed business information that constitutes trade secrets against illegal acquisition, use and disclosure, as well as for the modification and completion of some normative acts.

Directive (EU) 2016/943 clarified the concept of "trade secret" which is not reduced to the term know-how but which it includes, at the same time establishing a homogeneous definition within art. 2-point (1) (In the same sense, the transposition text of art. 2 paragraph (1) letter (a) of OG no. 25/2019 is also regulated), thus, "trade secret" means information that meets all of the following requirements:

(a) are secret in the sense that they are not, as a whole or as their elements are presented or articulated, generally known or easily accessible to people in the circles that normally deal with the type of information in question;

(b) have commercial value by being secret;

(c) has been the subject of reasonable measures, in the circumstances, taken by the person legally in control of that information, to keep it secret.

We note from the description above that from the definition of trade secret, the Union legislator excludes insignificant information, as well as the experience and skills acquired by employees in the normal course of their activity, and also excludes information that is generally known or immediately accessible to people in circles who normally deal with the type of information in question.

Differences in the legal protection of trade secrets offered by Member States mean that trade secrets do not enjoy an equivalent level of protection across the European Union, resulting in the fragmentation of the internal market in this area. The immediate consequence is that the internal market is affected by the fact that such differences reduce the incentives for companies to carry out cross-border economic activities related to innovation, including research cooperation, investment in other Member States, which depend on the use of information benefiting from protection as trade secrets.

Taking into account the context stated above, the Union legislator regulates in the framework of art.3 of Directive (EU) 2016/943, the circumstances in which the acquisition of a trade secret is considered legal, respectively, whenever the trade secret is obtained through any of the following means: (a) independent discovery or creation; (b) analyzing, studying, disassembling or testing a product or object that has been made public or is lawfully in the possession of the person who acquired the information and who is not under any legally valid obligation to limit the acquisition of trade secrets; (c) exercising the right of workers or workers' representatives to information and consultation in accordance with Union law and national laws and practices; (d) any other practice which, under the circumstances, is consistent with fair trade practices (in the same sense, the transposition text of art. 3 paragraph (1) of OG no. 25/2019 is provided).

Per a contrario, in accordance with the provisions of art. 4 para. (1) (in the same sense, the transposition text of art. 4 paragraph (1) - paragraph (2) of OG no. 25/2019 is provided) and (2) of the union provision, the acquisition of a trade secret without the consent of the holder of the trade secret will be considered illegal if it is carried out through behavior that is contrary to fair trade practices (see in this sense, Niță and Gheorghiu 2022, 181-190). To the same extent, we are in the presence of an illegal acquisition of a trade secret whenever its acquisition was achieved by "unauthorized access, appropriation or copying of any documents, objects, materials, substances or electronic files containing a trade secret or which can be deduced to be a secret trade" legally under the control of the trade secret holder.

Para. (3) (in the same sense, the transposition text of art. 4 paragraph (3) of OG no. 25/2019 is provided) of art. 4 regulates the illegal nature of the use or disclosure of the trade secret, in direct connection with a qualified capacity of the violator, in the sense that a contractual relationship was established between him and the legal owner of the trade secret prior to the moment of use or disclosure of the secret. Therefore, the use or disclosure of a trade secret is considered illegal whenever it is committed, without the consent of the holder of the trade secret, by a person who meets any of the following conditions:

(a) acquired the trade secret illegally;

(b) violates a confidentiality agreement or any other non-disclosure obligation;
(c) violates a contractual or other obligation that restricts the use of the trade secret.

Likewise, the acquisition, use or disclosure of a trade secret is considered illegal whenever a person, at the time of acquisition, use or disclosure, was aware or should have been aware, under the given circumstances, of the fact that the trade secret was obtained, directly or indirectly, from another person who used or disclosed the trade secret illegally.

Measures, procedures and remedial actions aimed at the protection of know-how

Pursuant to art. 6 of Directive (EU) 2016/943, the member states, through the transposition provisions, have the freedom to establish the measures, procedures and reparative actions necessary to ensure the availability of remedies before the civil courts against the illegal acquisition, use and disclosure of secrets commercial. Within the art. 6 of OG no. 25/2019, the Romanian legislator provides that for the protection of the trade secret against illegal acquisition, use and disclosure, its owner can apply to the court.

However, paragraph (2) of art. 6 and art. 7 of the Union norm as well as art. 7 of the transposition norm "draws" limits for national courts regarding procedural availability in the sense that only if the remedial measures, procedures and actions: (a) are fair and equitable; (b) do not involve unnecessary complexity or cost, unreasonable timescales or unjustified delays; (c) are effective and have a deterrent effect; (d) are applicable in a way that is proportionate; (d) are applicable in a way that avoids creating obstacles to legitimate trade in the internal market; (e) provides safeguards against their misuse.

To the same extent, Member States are obliged to regulate measures against the claimant, whenever the defendant reports that "a claim regarding the illegal acquisition, use or disclosure of a trade secret is manifestly unfounded and it is found that the claimant has initiated legal proceedings abusively or in bad faith. Those measures may, if appropriate, include the awarding of damages to the defendant, the imposition of sanctions against the plaintiff (see in this regard, art. 7 paragraph (2) of Directive (EU) 2016/943). In this regard, the competent judicial authorities have the power to require the claimant to provide evidence that can reasonably be considered available, from which it can be seen that the trade secret exists and that it belongs to the claimant.

Art. 8 of the Union provision provides for the need to protect confidentiality throughout the judicial proceedings subject to appropriate guarantees that ensure the right to an effective remedy and a fair trial reserved for the defendant. Such protection should be maintained even after the conclusion of the legal proceedings and as long as the information constituting the trade secret is not in the public domain. Such examples can be, as the case may be, the restriction of the circle of persons who have access to the courtroom, the restriction of the circle of authorized persons who have access to evidence. Relevant in this sense is the transposition text inserted in art. 9 of OG no. 25/2019, as follows "(1) If the court, ex officio or at the reasoned request of a party, assesses that the conduct of the process in the presence of the public may affect or compromise the commercial or alleged commercial secret, taking into account the circumstances provided for in art. 11 paragraph (2), may order that the trial be conducted without the presence of the public, art. 213 para. (2) of Law no. 134/2010 on the code of civil procedure republished with subsequent amendments and additions, being applicable accordingly... (3) At the justified request of a party or ex officio, the court may take the appropriate measures in order to preserve the confidentiality of any trade secrets or alleged trade secrets used or mentioned during the judicial proceedings. (4) In application of the provisions of para. (3), the court may order: a) the restriction, in whole or in part, to a limited number of persons of access to any document that contains trade secrets or alleged trade secrets and which was presented by parties or third parties; b) restricting access to court hearings to a limited number of people, when commercial secrets or alleged commercial

secrets may be disclosed, as well as to the recordings or transcripts related to the respective court hearings; c) making it available to any person other than those who are part of the limited number of people provided for in letter a) and b) of a non-confidential version of any court decision, from which passages containing trade secrets have been removed or hidden; d) any other measures provided by law to ensure the confidentiality of trade secrets or alleged trade secrets".

Also, in accordance with the provisions inserted in art. 10 of Directive (EU) 2016/943 reiterated in the transposition text of art. 10 of OG no. 25/2019, in order to prevent possible destruction, theft, or damage, the competent judicial authorities may order, at the request of the trade secret holder, any of the following provisional and protective measures against the alleged infringer:

(a) the termination or, as the case may be, the provisional prohibition of the use or disclosure of the trade secret;

(b) confiscation or surrender of goods suspected of infringing the rules, including imported goods, so as to prevent their entry or circulation on the market.

Conclusions

In a single, cross-border market, collaborative research, dissemination of knowledge and information is very important to increase the level of development which is an essential element for ensuring dynamic, positive and fair business development opportunities for traders.
Therefore, faced with such a context, we believe that by protecting such a wide range of know-how and business information, either as a supplement or as an alternative to intellectual property rights, trade secrets allow creators and innovators to profit from their own creations and innovations, thus becoming particularly important for traders' competitiveness, R&D and innovation performance.

However, traders using innovations are increasingly exposed to the risk of illegal practices aimed at the misappropriation of trade secrets, such as theft, unauthorized reproduction, economic espionage or breach of confidentiality requirements, both within the Union, as well as outside it. Consequently, we believe that it was necessary that at the level of the European Union, appropriate legislation be adopted in the matter, and we mention here Directive (EU) 2016/943, a legislative instrument that is the subject of debate in this study, since in the absence of such an effective legal remedy, cross-border activities related to innovation in the internal market would be compromised and trade secrets could not exploit their potential as vectors of growth and job creation.

The adoption of the above-mentioned directive is the result of international efforts that led to the conclusion of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) (By Decision 94/800/EC of 22 December 1994, the Council concludes, on behalf of the European Community and with regard to matters within its competence, the results of the Uruguay Round of the negotiations contained in the Final Act of Marrackech signed in 1994 in Morocco by representatives of the European Community and its member countries. Therefore, on behalf of the European Community (today the European Union) through Decision 94/800/EC, the Council approves the agreement under which the World Trade Organization (WTO) was established. Thus, the Agreement establishing the WTO includes several annexes that contain the specific agreements between which we recall Annex 1 C containing the Agreement on Trade-Related Aspects of Intellectual Property Rights including Trade in Counterfeit Goods (TRIPS).) The TRIPS Agreement contains, among other things, provisions on the protection of trade secrets against illegal acquisition, use or disclosure by third parties, which constitute common international standards but also provisions by which both the European Union and the Member States are invited to make every effort so that through appropriate legislation to achieve the protection of trade secrets.

Following the signing of the TRIPS Agreement, we note that if the appropriate legislation was adopted at the level of the European Union in accordance with the international act, nevertheless there are important differences between the transposition legislations at the level of the member states in terms of protecting trade secrets against the illegal acquisition, use or disclosure to other people.

Pursuant to Recital 7 of Directive (EU) 2016/943, several examples are identified regarding the legislative inconsistencies noted in the directive's transposition rules, thus, in a first example, not all member states have adopted national definitions of secrecy trade or the illegal acquisition, use or disclosure of a trade secret. There is no consistency in the civil remedies available for the unlawful acquisition, use or disclosure of trade secrets, as not all Member States may impose cease and desist orders against third parties who are not competitors of the legitimate trade secret holder. There are also differences between Member States in the treatment of a third party who has obtained the trade secret in good faith, but later learns, at the time of use, that the acquisition is based on a previous illegal acquisition of the trade secret by another part. National rules also differ in what regards the legitimate trade secret holders to request the destruction of goods produced by third parties who use the trade secret illegally, or the return or destruction of any documents, files or materials containing or incorporating the acquired trade secret, or used illegally.

In addition, the national rules applicable to the calculation of damages do not always take into account the intangible nature of trade secrets, which makes the actual loss of profit or unjust enrichment of the infringer difficult to demonstrate when the market value of the information in question cannot be established. Only a few Member States allow the application of abstract rules for calculating damages based on royalties or rights that would reasonably have been due if there had been a license to use the trade secret.

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The Constitutional Reflection of the Right to a Healthy and Ecologically Balanced Environment

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ABSTRACT: Nowadays, people have become increasingly concerned about topics such as: the environment, climate, ecology, climate change. Human coexistence on our beautiful blue planet currently involves, more than ever, the development of a legal conscience. In this background, this study proposes a generous objective, namely to know the general legal framework regarding the regulation in Romanian legislation of the right to a healthy and ecologically balanced environment. From this perspective, we believe that the theme is highly topical and important for several categories of subjects: private individuals, public authorities, but also for states, to a large extent. The proposed architecture of the paperwork consists of several parts, organized in a logical sequence. Part I provides a brief introduction to the general subject of the topic. Part II analyzes the legislative framework in order to know how the constituent legislator regulated the right to a healthy environment. Part III focuses on discussing the contribution of case-law in shaping the state's obligation to provide the legal framework for the exercise of the right to a healthy and ecologically balanced environment.

KEYWORDS: Constitution, public authorities, the right to a healthy and ecologically balanced environment, the Constitutional Court of Romania, state

Introduction

The analysis of the proposed topic is based on the idea that scientific research must be carried out from a threefold perspective, i.e., knowledge of the legislation, of the position of the doctrine on the topic under analysis and of judicial practice. According to professor M. Duțu: "following developments in recognizing and securing its meaning in constitutions, domestic law, EU law and international law, the right to the environment has experienced important developments" (Duțu 2021, 248). Therefore, the paperwork is focused on the practical component, namely on the identification of cases that highlight the state's obligations in relation to the environment.

As noted in the doctrine, "although the European Convention on Human Rights does not have an express text guaranteeing the right to a healthy environment, its case-law has provided important rulings with an impact on international environmental law" (Hanciu 2021, 79). From this perspective, the research methodology of this paperwork presents the views of judges of the Constitutional Court or even of the European Court of Human Rights, in relation to environmental issues, in actual cases. In our view, "it is incumbent on the Constitutional Court of Romania to establish, through its case-law, by binding decisions, the manner of interpretation of constitutional texts" (Ștefan 2017, 83).

As far as the environment is concerned, we believe that today we should be concerned not so much with looking for those responsible for its destruction as with finding solutions to respect and preserve it. In our opinion, shifting the focus of the problem from liability to responsibility could be a possible solution to environmental protection. Therefore, it seems more appropriate not only to ask rhetorically: "*Who is to blame for environmental destruction*?" when we can ask: "What can we do ourselves to stop environmental destruction?" According to the doctrine, "from the historical point of view, states have been concerned to incorporate the issue of human responsibility in their constitutions and common acts under different terminologies" (Ștefan 2013, 12).

By using methods specific to law, the paperwork will underline the conclusion that the issue of legal regulation of environmental protection is becoming increasingly complex,

including not only legal liability but also responsibility, in consideration of the protection of present and future generations.

National constitutional and legal reference points of the right to a healthy environment

The Constitution of Romania regulates the right to a healthy environment in art. 35 and the legislator has regulated rights and duties with regard to the environment. According to art. 35 para. (1): "*The State shall acknowledge the right of every person to a healthy, well preserved and balanced environment".* According to art. 35 para. (2): "*The State shall provide the legislative framework for the exercise of such right"* while, para. (3) provides: *"Natural and legal entities shall be bound to protect and improve the environment*". According to the common language, in a general sense, *to protect* means: "to defend" and to *improve* means: "to enhance". From this perspective, we appreciate that, in fulfilling the constitutional duty, natural and legal persons can express themselves both through actions and inactions, i.e., by refraining from destroying the environment, similar to the ethical principle "do no harm".

In the same vein, we consider useful in our approach the legal interpretation of the coordinates to a health and ecologically balanced environment and the conjunction with art. 57 of the Constitution – *the exercise of the rights and freedoms*. We mention that art. 57 of the Constitution is placed in Title II – *Fundamental rights, freedoms and duties*, Chapter III – *Fundamental duties* and shall read as follows: "*Romanian citizens, foreign citizens, and stateless persons shall exercise their constitutional rights and freedoms in good faith, without any infringement of the rights and freedoms of others*". By analyzing the text, we note that the exercise of the rights and freedoms, being a compulsory norm, it requires compliance with two conditions: good faith and non-infringement of the rights and freedoms of others.

In case of the legal regulation, everyone observes it, as it is a non-negotiable legal obligation. The norm is compulsory, being even a constitutional obligation deriving from art. 1 para. (5) of the Constitution: "*In Romania, the observance of the Constitution, its supremacy and the laws shall be mandatory".* Furthermore, we agree with the opinion of professor C. Rarincescu "the binding nature of the legal rule undoubtedly derives from the general legal conscience" (Rarincescu 1936, 9).

In what concerns the environment, we consider the dimension of responsibility to be complex as it concerns not only the present but also future generations. Therefore, we believe that personal example of responsibility can be the right attitude in protecting the environment in general. From another perspective, national law even defines a term, namely "imminent damage". Law no. 554/2004 of the contentious administrative (published in Official Journal no. 1154 of 7 December 2004) defines in art. 2 para. (1) letter ș) *imminent damage*: "foreseeable and future material damage or, where appropriate, serious disturbance in the functioning of a public authority or a public service". Therefore, in our opinion, the right to a healthy environment cannot be conceived in the absence of the responsibility and the duty to protect it, to avoid causing damage, precisely for the sake of present and GEO no. 195/2005 on the environmental protection (published in Official Journal no. 1196 of 30 December 2005). According to art. 5 of this normative act: "the state recognizes the right of every individual to a healthy and ecologically balanced environment, guaranteeing to this end:

a.) access to environmental information, subject to the conditions of confidentiality laid down by law;

b.) the right of association in environmental organizations;

c.) the right to be consulted in decision-making process on the development of environmental policy and legislation, the issuing of related regulatory acts, the preparation of plans and programmes;

d.) the right to resort directly or through environmental organizations to administrative and/or judicial authorities, as appropriate, in environmental matters, whether or not damage has occurred;

e.) the right to compensation for damage suffered".

Furthermore, we also add that, according to the provisions of art. 6 para. (1) of GEO no. 195/2005: "*environmental protection is the obligation and responsibility of central and local public authorities and all natural and legal persons"*. A quote from Professor N. Popa is appropriate in this context: "human coexistence increasingly feels the need for security, clarity and order in its inner relationships" (Popa 2008, 63).

Case-law on the right to a healthy environment

In this section, the research methodology included a selection of case studies from the case-law of the Constitutional Court of Romania and the European Court of Human Rights, in order to investigate the contribution of national and European judicial practice on the rights and obligations of the state in relation to the environment.

On the one hand, the Constitutional Court of Romania, in its case-law, has ruled on the legal interpretation of the right to a healthy environment regulated by the Constitution and we will analyze two decisions from 2014 and 2022. On the other side, the study will also refer to the judgments of the European Court of Human Rights in case *Tătar v. Romania* and *Băcilă v. Romania.* In one case, the Constitutional Court of Romania held that "As regards the right to a healthy environment, the state has both negative and positive obligations. As far as the positive obligations of the state are concerned, these involve the creation of a legislative and administrative framework aimed at the effective prevention of damage to the environment and human health (Judgment of the European Court of Human Rights of 7 January 2009 in case *Tătar c. României*, para. 88). Therefore, the measures in question must be aimed at preventing environmental degradation, establishing the necessary remedies and regulating the sustainable use of natural resources" (Decision no. 80/2014 of the Constitutional Court of Romania, published in Official Journal no. 246 of 7 April 2014, para. 401).

Therefore, the Constitutional Court held in another case: "human dignity, from a constitutional point of view, entails two inherent dimensions, namely the relations between people, which concern people's right and obligation to observe them and, in that connection, to respect the fundamental rights and freedoms of their fellow human beings, as well as individual's relationship with the environment" (Decision no. 1/2012 of the Constitutional Court of Romania published in Official Journal no. 53 of 3 January 2012).

As regards the analysis of the right to a healthy environment, the Constitutional Court has recently developed, under several coordinates, the obligations of the state. Therefore, the Court holds that: "as regards the right to a healthy environment, the provisions of art. 35 of the Fundamental Law establish the positive obligation of the state to provide the legislative framework for the exercise of the right to a healthy and ecologically balanced environment, and the duty of natural and legal persons to protect and improve the environment" (Decision no. 295/2022 of the Constitutional Court of Romania, published in Official Journal no. 568 of 10 June 2022, para. 173). In substantiation of decision no. 295/2022, the Court also held: "Furthermore, given the market economy, the provisions of art. 135 para. (2) letter e) and f) of the Constitution establishes the obligation of the state to ensure the restoration and protection of the environment and the maintenance of the ecological balance, by creating the necessary conditions for improving the quality of life" (Idem). In the opinion of the Court: "The right to a healthy environment means taking all necessary measures to ensure a better quality of the environment, and preserving a healthy environment means in fact preserving and improving the quality of life in order to maintain the ecological balance" (Idem). In conclusion, the Court held that: "In order to fulfill the obligation of protection, the state must adopt sufficient

regulatory measures to ensure the effective exercise of the right to a healthy environment of every person" (Idem, para. 174).

The following are two other cases, but this time from the case-law of the European Court of Human Rights, concerning the passivity of public authorities in relation to the environment, both against Romania.

In first case, *Băcilă v. Romania*, the plaintiff filed a petition before the Court on 27 January 2004 complaining that the environmental pollution generated by company *S.* was seriously affecting her health and the environment. The plaintiff complained about the passivity of the local authorities of Copșa Mică in taking measures to remedy the situation. The respective plant was the main employer in the area and the main producer of lead and zinc (Judgment of the European Court of Human Rights in case *Băcilă v. Romania,* pronounced on 30 March 2010).

The Court held the following in case *Băcilă v. Romania*: "In the course of the proceedings, the plaintiff submitted medical documents attesting the impact and causal link between the pollution and the deterioration of her health, in particular lead and sulphur dioxide poisoning." (para. 63). The Court decided the following on 30 March 2010: "despite the margin of discretion granted to the defendant state, it failed to maintain a fair balance between the interests of the economic well-being of the town of Copșa Mică - that of maintaining the activity of the main employer in the town - and the applicant's effective right to respect for her home and her private and family life" (para. 72). The Court held the following: "this interest cannot prevail over the right of the persons concerned to benefit from a balanced environment which does not affect their health. The existence of serious and proven consequences for the health of the plaintiff and the other inhabitants of Copșa Mică imposed a positive obligation on the State to adopt and implement reasonable and appropriate measures capable of protecting their well-being" (para. 71) (Judgment of the European Court of Human Rights in case *Băcilă v. Romania,* pronounced on 30 March 2010).

In the second case, *Tătar v. Romania*, the two plaintiffs, father and son filed petition before the Court on 17 July 2000 and complained that the technological process used by company *A.* was a danger to their lives. Furthermore, the plaintiffs complained about the passivity of the authorities in this situation (Judgment of the European Court of Human Rights in case *Tătar v. Romania*, pronounced on 27 January 2009).

In brief, de facto situation was as follows: "On 30 January 2000 an ecological accident occurred, i.e., a large quantity of polluted water (estimated at almost 100,000 cubic metres) containing, among other things, sodium cyanide was discharged into Săsar river, then into Lăpuș and Someș rivers. Polluted water in Someș river was discharged in Tisa River (…), crossed the border between Romania and Hungary, (...) crossed the border between Romania and Serbia and Montenegro and re-entered the territory of Romania and subsequently discharged into the Danube. In 14 days, the polluted water travelled 800 km, and finally it was discharged into the Black Sea through the Danube Delta." (para. 25).

On the health and environmental consequences of the environmental accident of January 2000, the Court: "holds that the population of Baia Mare, to which the plaintiffs belong, has had to live in a state of anguish and uncertainty accentuated by the passivity of the national authorities, which were under the obligation to provide sufficient and detailed information on the past, present and future consequences of the environmental accident on their health and on the environment" (para. 122). The Court "after examining the evidence on file, is convinced that the national authorities have not fulfilled their obligation to inform the population of Baia Mare and the plaintiffs. The latter are not in a position to know what measures could be taken to prevent a similar accident or what measures should be taken in the event of a repetition of such an accident" (para. 124). Therefore, "the Court finds that the defendant State has failed to fulfil its obligation to guarantee the applicants' right to respect for their private and family life within the meaning of Article 8 of the Convention" (para.

125) (Judgment of the European Court of Human Rights in case *Tătar v. Romania*, pronounced on 27 January 2009).

Conclusions

This analysis illustrated how the Romanian legislator regulated the right to a healthy and ecologically balanced environment. After documenting the topic, it was noted that it is constitutionally and legally enshrined. Therefore, article 35 of the Constitution of Romania regulates the right to a healthy and ecologically balanced environment, the legal framework being supplemented by Government Emergency Ordinance no. 195/2005 on environmental protection. Moreover, as noted in the doctrine, "law has been and continues to be subject to the tensions between the general and the particular, the singular and the universal, the equal and the unequal, the old and the new, the stable and the changing" (Lazăr 2004, 9).

On the other hand, our research also considered how the legal regulation is implemented in practice. Therefore, we have used the case-law of the Constitutional Court and the selection of the case studies was based on the judges' views on the analysis of Article 35 of the Constitution. Furthermore, we have also considered necessary to discuss two cases decided by the European Court of Human Rights which had in common the fact that they were both brought against the Romanian State because it did not fulfil certain obligations and both were decided in favor of the defendants.

The final conclusion that emerges from our paperwork is that there is a legal and constitutional obligation of the state to ensure the legal framework for the exercise of the right to a healthy and ecologically balanced environment.

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Historical References and Doctrinal Precedents of Forensic Science Worldwide

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ABSTRACT: Forensic science owes its origins to the people who developed the principles and techniques needed to identify and compare physical evidenceas, well as those who recognized the need to consolidate these principles into a coherent scientific discipline. Evidence of forensic science dates back to antiquity, but it was not until the 19th century that science was rigorously applied to criminal cases through advances in the way criminal cases were handled, which improved the validity of the conclusions drawn from investigations by the judicial authorities. Many steps have also been taken to organize specialist areas within police departments, including forensic science. Furthermore, forensic science has literary roots, as evidenced by the forensic novels written by famous authors, which were based on the methods, techniques and tactics used in forensic science. This article contains a brief analysis of some of the key moments and doctrinal precedents in the history of forensic science, seen in the evolution of its subfields. Such insights aim to provide readers with a deeper understanding of the current state and trends of this science.

KEYWORDS: forensic science, forensic medicine, genetics, dactyloscopy, ballistics, forensic novel, forensic laboratory

Introductory aspects

Forensic science owes its origins, firstly, to the people who developed the principles and techniques needed to identify or compare physical evidence and, secondly, to those who recognized the need to unify these principles into a coherent scientific discipline (Saferstein 2011, 11). Since ancient times, the search has been on for an infallible means, an irrefutable piece of evidence that would stigmatize the offender and enable him to be identified (Lăpăduși 2011a, 704). The main forensic investigative tools used to identify perpetrators have been the observation and interpretation of physical evidence (Eckert 1997, 11). It was not until the 19th century that science was rigorously applied to these tools through advances in the way files were investigated, which improved the validity of the conclusions drawn from investigations by the judicial authorities. Steps were taken to organize specialist areas within police departments, including forensic science.

The origins of forensic science

The developments in forensic science have not been uniform throughout the world. Concerns to establish methods for detecting crime and criminals have been around since ancient times, but at first, they were isolated practices and only gradually, and not always scientifically, did they develop into independent research methods. Forensics was established as an autonomous judicial science at the end of the 19th century, separating from Medical-legal science (Buzatu 2013, 15).

Medical-legal science

The origins of medical-legal science date back to antiquity, with the timid attempt to determine the degree of guilt of an offender on the basis of scientific criteria, given that forensic knowledge was initially a monopoly of the priest who also performed the social function of the

judge. In ancient Egypt, the laws of Menes required a matron to examine a woman sentenced to death who, in order to prolong her life by a few months, claimed to be pregnant.

Among the ancient Greeks, Hippocrates weighed in the judge's judgment his personal finding regarding the moral disturbances caused to virgins by an untimely menstruation. When examining the charge of abortion, Greek judges invoked the authority of Aristotle, who had fixed the fortieth day after conception as the time of foetal insemination.

In Romans, the *Digest* stipulates that the judge shall not pronounce in cases of doubtful pregnancy without the prior opinion of a midwife. *The Lex Aquilia* devotes a special chapter to the examination of wounds in terms of their lethality (Minovici 1928, 2).

Gradually, medicine is gradually taking away bit by bit its authority to impose itself in the guidance of justice. Thus, in the Salic Law and in the Chapters of Charles the Great, as early as the year 800, the need for medical intervention in certain cases brought before the courts is formally proclaimed.

The first decisive step in this direction was taken by Emperor Charles the Fifth, who, in his *Constitutio criminalis Carolina,* promulgated in 1532 at Regensburg, decided that in certain circumstances, justice must necessarily have recourse to the services of the doctor to help and enlighten it in the resolution of the case in question. The promulgation of this law is considered the most important date in the evolution of the philosophical spirit of medieval society, putting an end to judicial arbitrariness and thus establishing the scientific control of legal medicine.

The one who gave the science of forensic medicine its full scope is Paul Zacchias who in 1621, through his work *"Paul Zacchiae, medici romani, opus jurisperitis maxime necesarium, medicis per utile, coeteris non in jucundum"* raised forensic medicine to the rank of a science that required for its evolution to use results obtained from other sciences.

The second half of the 17th century saw the beginning of the period of rigorous scientific certainty, for example, in 1753, through his study of the types of death, Louis made a valuable contribution to the signs of death and highlighted the anatomical characteristics of death by hanging. Following the contribution of other researchers in the following centuries, the field of forensic medicine improved with findings on the signs of death, the process of decomposition, the characteristics of identity, the effects of wounds caused by weapons, the causes of death, injuries to the intellect, etc. (Minovici 1928, 2).

Advances in both medicine and science in general have contributed to a considerable increase in the use of medical evidence in court. In addition, other types of scientific evidence began to evolve only in the 18th and 19th centuries, a period in which the level of human knowledge developed, leading to the emergence of different sub-branches of medicine, such as forensic psychiatry, which will be discussed below (White 2004, 3).

Forensic psychiatry

The beginnings of forensic psychiatry, as a specialty of forensic science, is linked to the Daniel M'Naughten case in England-1843, in which a madman shot a government official and was found guilty by virtue of the madness he suffered from.

This case has gone down in the history of forensic medicine as the "M'Naughten rule," according to which every person is presumed to be of sound mind and in order to establish a defense on the ground of insanity-mental insanity, it must be proved that at the time of the commission of the offence, the offender was under a defect of reason due to mental disease so that, if necessary, he had no representation of the nature and consequences of the act committed or if he had knowledge of such a situation, he had no representation that he would commit a crime. One of the leaders in this field of psychiatry was Dr. Isaac Ray (1807-1881), the father of American forensic psychiatry, who wrote a *"Treatise on the Medical Jurisprudence of Insanity"* in 1838. Dr. Quen, another leading representative of forensic psychiatry, had

previously written about earlier historical aspects of forensic psychiatry in America, realizing once again the close connection between psychiatry and law.

The cases that have dealt with such a situation are summarized and synthesized in this treatise, which has exerted a vast influence in case law. For example, an effective implementation of the ideas in the treaty was pointed out to the court by the defense counsel in the court case brought against Daniel M'Naghten in 1843, to which I referred above. At trial, counsel quoted extensively from the treatise, rejecting traditional views of insanity; the defense thus relied on the defendant's ability to distinguish 'what is right from what is wrong' in favor of a broader approach based on causation.

Criminal profiling is another approach to support police investigation of cases, based on a study of the serial killer's behavior, so that a suspect can be assessed before and after being taken into custody.

Forensic toxicology

From prehistoric times there was also a rudimentary knowledge of forensic toxicology, as a sub-branch of forensic medicine, when plants were first used by man for their poisonous content in fishing, hunting and for destroying human enemies (see also Buzatu 2012, 27 and Buzatu 2015, 1). Early Indian and Egyptian writings included references to poisons and antidotes. Greek and Roman literature recorded the use of poisons and venoms from plant sources for suicidal and homicidal purposes. In 339 BC, Socrates was executed with a poisonous extract of hemlock. In 331 BC, a mass poisoning took place in Rome. In 300 BC, Theophrastus wrote a history of plants and mentioned plant poisons and their actions.

Before and during the Renaissance, poisoning became an art, with the histories of European courts full of poisoning deaths of kings, popes and nobility. The guards tasted the food and drank the wine intended for the royal table. Professional poisoning took place until the 19th century. In England, Henry III punished a poisoner by boiling to death. The most common poisons during this period were hemlock, aconite, opium, arsenic and corrosive sublimate. Autopsies and chemical analyses were rarely performed until Joseph Jacob Plenck declared in 1781: "The only sure sign of poisoning is the chemical identification of the poison in the organs of the body" (White 2004, 31).

Toxicological analysis of organs in human bodies was rarely carried out before 1900 due to the primitive development of the forensic investigation system. Elected coroners were laymen with little scientific knowledge. It took the change in the forensic investigation system in Massachusetts in 1877 and in New York in 1918 to reintroduce the importance of proper postmortem toxicology into forensic investigations. If a case was notorious and an examination of the mode of poisoning was needed, the coroner sought the services of a professor of chemistry. During the 1890s, Dr. Alexander O. Gettler noted in his review of the history of toxicology that it took one such professor 20 months to analyze the organs of a postmortem case. After the end of the Second World War, the "age of instrumentation" began. Instrumentation allowed more precise quantification of toxic substances in tissues and multiple testing with automated equipment. Combining automated equipment with computers allowed multiple analyses, calculations, and printing and storing of results.

Forensic odontology

From the perspective of forensic odontology, the examination of dental samples and dentures has been reported as early as 2500 BC, when two molars bound together with gold wire were found in a tomb in Giza-Egypt. Tooth impressions were used as seals for personal identification more than 900 years ago. In 66 AD, Nero killed his wife and presented her head on a plate to his mistress, who identified the head by the malformation of a blackened tooth.

One of the earliest cases in which dental samples were used for identification in America involved the death of Dr. Joseph Warren in 1775. A physician and leader of Americans concerned with independence, Dr. Warren was killed during the Battle of Bunker Hill and buried in a mass grave. Paul Revere, who had made him a denture containing a silver and ivory bridge, later identified Dr. Warren's body using this bridge (White 2004, 37).

The first identification of a bite mark was made on a piece of cheese left at a crime scene. When compared to the teeth marks of the robbery suspect, the dental evidence led to a conviction in the case in 1906 at Cumberland Assizes in Carlisle, England.

Bite evidence is one of the most interesting applications of dental forensics because it provides an unusual direct link between an offender and a victim. A 1949 murder case in Tunbridge Wells, England, provides a clear example where investigations by dental experts revealed that dental impressions taken from the victim's bite marks matched those of her husband. Perhaps the most important and useful application of the forensic dentist's expertise is the management of victim identification in mass fatalities, such as aviation disasters and wartime military deaths. After World War II, mass graves of victims of war crimes and military operations were opened for identification. In one such case, Strom in Norway identified more than half of the 211 Norwegians killed by the Nazis during the occupation.

Both dental and fingerprint examinations contribute significantly to the identification of transport accident victims. The importance of the dental examiner was recognized in the late 1960s when disaster response teams were organized. When jumbo jets crashed at Tenerife airport in the Canary Islands in March 1977, the American and Dutch governments sent teams of forensic experts to support the local authorities. The arrival of the Dutch identification team allowed them to collect dental samples from the Dutch victims by removing their upper and lower jaws, leading to their identification process, while the Spanish authorities ran their investigation in parallel, also allowing the identification of the bodies.

Forensic genetics

The use of genetics has been rapidly adopted by the forensic community and now plays an important role worldwide in both crime investigation and relationship testing.

In 1900, Karl Landsteiner described the ABO blood grouping system and noted that individuals could be placed into different groups according to their blood type. This was the first step in the development of forensic haematogenetics (Goodwin 2011, 2).

In the 1960s and 1970s, developments in molecular biology, including restriction enzymes, *Sanger* sequencing and *Southern blotting*, allowed scientists to examine DNA sequences. By 1978, DNA polymorphisms could be detected using *Southern Blotting*, and in 1980 the analysis of the first strongly polymorphic *locus* was reported, in which polymorphism was caused by allele length differences.

It was not until September 1984 that Alec Jeffreys realized the potential forensic applications of *minisatellite loci*. The technique developed by Jeffreys involved extracting DNA and cutting it with a restriction enzyme before performing agarose gel electrophoresis, Southern blotting and probe hybridisation to detect *polymorphic loci*. The end result was a series of black bands on X-ray film, which was termed *DNA fingerprint-DNA fingerprinting.*

In the case of the first DNA fingerprints, multilocus probes (MLPs) detected multiple minisatellite loci simultaneously, leading to multiple band patterns. While multi-band fingerprints were very informative, they were difficult to interpret. New probes were designed that were specific to a single locus (single locus probes, SLP) and therefore produced only one or two bands for each individual. Minisatellite analysis was a powerful tool, but suffered from several limitations: a relatively large amount of DNA was required, it did not work with degraded DNA, comparison between laboratories was difficult and analysis was time-

consuming. Even so, the use of minisatellite analysis using SLP was common for a few years until it was replaced by *polymerase* chain reaction (PCR)-based systems.

A key development in the history of forensic genetics occurred with the advent of a process that can amplify specific regions of DNA - PCR. The PCR process was conceptualized in 1983 by Kary Mullis. The development of PCR has had a profound effect on all aspects of molecular biology, including forensic genetics, and in recognition of the significance of the development of the technique, Kary Mullis was awarded the Nobel Prize in Chemistry in 1993.

PCR increases the sensitivity of DNA analysis to the point where DNA profiles can be generated from just a few cells, reduces the time it takes to produce a profile, can be used with degraded DNA and allows analysis of almost any polymorphism in the genome.

The first application of PCR in a forensic case involved the analysis of single nucleotide polymorphisms within the *human leukocyte antigen* (HLA)-*DQα locus* (part of the major *histocompatibility* complex (MHC)). This was shortly followed by short *tandem repeat* (STR) analysis, which are now the most commonly used genetic markers in forensic science. The rapid development of DNA analysis technology includes advances in DNA extraction and quantification methodology, the development of commercial PCR-based typing kits and equipment for the detection of DNA polymorphisms. In addition to technical advances, another important part of the development of DNA profiling that has had an impact on every field of forensic science is quality assurance. The admissibility of DNA evidence was seriously challenged in the US in 1989 - *People* v. *Castro*; this case and subsequent cases in many countries have led to increased standardization and quality assurance in forensic genetics and other areas of forensic science (Goodwin 2011, 2). Accreditation of both laboratories and individuals is therefore an increasingly important issue in forensic science. The combination of technical advances, high levels of standardization and quality has led to the recognition of forensic DNA analysis as a robust and reliable forensic tool.

Material forgery and falsification of documents

Forgers also date back to antiquity. Suetonius claimed that Titus was the greatest forger of his age. Likewise, *Procopius* spoke of Priscus of Emes, who forged the writing of his contemporaries and was only exposed by his confession.

The Roman judge Quintilianus used a bloody fingerprint to acquit a young man accused of killing his father (Cârjan 2005, 17). Also, from the time of ancient Rome - *Lex Cornelia de falsis* and in the time of Justinian - *Noves 49 and 73 of 539*, the first known regulations appeared in the control of allegedly forged documents by which forgeries could be detected (Suciu 1975, 28). Thus, Justinian mentioned in Novela 73 a miscarriage of justice due to experts who considered a document to be a forgery whose authenticity was later established, noting that "the resemblance of the writings seems to me very suspicious: it is an argument which has deceived us a thousand times; we shall not be able to refer to it until we have better evidence." Justinian also denied in Novela 49 that certainty could be obtained by graphic expertise, taking steps to ensure the authenticity of the pieces serving for comparison.

In 1370, Charles V ruled on a forgery affair involving the nobleman of Riviere, the king's first chamberlain.

Francois Demelle published in France in 1609, *"Avis pour juger les inscription en faux"* (Notice for judging false inscriptions).

In 1699, Etienne de Blegny, author of one of the first treatises on forensic medicine, described the procedures for checking handwriting.

The 19th century was considered by Edmond Locard to be the "painful period" of graphical expertise in which momentous causes put experts in painful situations. In the "Affair of the Ronciere" the experts clarified the objectives of the graphic expertise but their conclusions were ignored by the court, a first discredit of the experts. The situation became

tragic with the "Dreyfus Affair-1894" and laughable with the “Crawford-Theres Humbert Affair”. A remarkable progress was made in graphology, which tended to study more than the shape of letters and the general characters of graphism. It is the person who does the writing (Cârjan 2005, 17).

The immutable drawing

From antiquity also dates *the immutable drawing* representing particular reliefs, also known as patterns, drawings or particular prints. These appear on the walls of a Neolithic dolmen, on Chinese seals from the 3rd century BC and on Greek amphorae dating from the same period. One of the most telling pieces of evidence is an ancient Indian carving found in Canada at the edge of Kejimkoojik Lake, in the outline of a hand on the volar side where papillary patterns and flexion folds are traced. Their significance remains unclear. Also dating from the Neolithic are several red and black prints belonging to primitive people, discovered by Regnault in the Gargas Cave. In 100 AD, Roman pots made of clay and brick were found with the makers' imprints. Also, in the 1200s, the Chinese distinguished two types of finger designs: ‘lo’ and ‘ki’ (Cârjan 2005, 18).

Dactyloscopy

The invariability of papillary patterns, to which the *emergence of dactyloscopy* is linked, has attracted the attention of many people with interests in various fields. For example, some Chinese porcelain art manufacturers marked their works with the personal drawing of the left hand's polycryptol fingernail, which represented an inimitable imprint and was imprinted in such a way as to last as long as the work existed (Lăpăduși 2011a, 704).

The papillary ridges that form the designs on the fingers have always been so conspicuous that their study has led to the conclusion that they do not match one another from one individual to another, and not even one finger, hand or foot resembles another.

The first to interpret papillary lines was John Evangelist Purkinji who in 1823 made the first classification of papillary impressions into nine configurations (Lăpăduși 2011b, 752).

Hurscheke published a paper in 1845 in which he drew attention to the variety of papillary drawings and seven years later, in 1852, Herman Wellcker began a study of papillary ridges from his own hand which he continued in 1897, finally publishing two illustrative figures in the work “Archives de Gross.”

In 1877, William Jerschel, a British civil servant in the Indian Civil Service, first noticed the strange marks left by dirty hands-on wood, glass and paper. These were impressions made up of lines, arches, loops and vertebrae. This was the beginning of his first systematic studies of fingerprints, which led to the introduction of fingerprint recording in a district of India.

A Scottish physician, Henry Faulds, published the results of research in 1880, concluding that papillary line drawings do not change over a lifetime and can therefore be used for identification purposes better than photography. In fact, William Herschel and Henry Faulds embraced the idea of using fingerprints to detect criminals.

Francis Galton, a British anthropologist and cousin of the famous Charles Darwin, is considered the founder of police fingerprinting and the founder of biometrics by developing a comprehensive study of fingerprints from the biological aspect of heredity and race. In 1890, he developed a method of classifying offenders' records according to the shape of papillary drawings, using which he found a pre-existing record in a larger collection of records.

In 1899, Edward Richard Henry presented his fingerprint classification system based on the triangle called “delta” and five basic drawings, after which he published his work *“Classification and uses of fingerprints”,* considered the “bible” of English dactyloscopy. In

1900, England became the first European country to introduce the dactyloscopic system of identification and in 1901 established the Scotland Yard Fingerprint Foundation.

Ironically, in 1902 and outside the borders of England, Alphonse Bertillon identifies the perpetrator of a murder (Lăpăduși 2011b, 752).

Ballistics

As with any evolving science, the exact origins of forensic firearms identification are shrouded in obscurity. It will probably never be known exactly when it was first observed that bullets fired from a particular gun had a number of grooves printed at equal distances, all angled in the same direction and at the same angle, and which were the same on every bullet fired from that gun. It will also never be known when the next logical step was taken to compare the width, number and degree of inclination of the grooves with those on guns of another make. The next step, however, required a quantum leap in ballistics to demonstrate that all bullets fired from the same gun had microscopic striations (parallel printed lines) that were unique to the gun in which they were fired (Heard 2008, 147).

The first instances of bullet identification date back to June 1900, when an article by Dr. A.L. Hall appeared in the *Buffalo Medical Journal,* showing that bullets fired from different makes and types of guns, of the same caliber, had wound marks of different types. Unfortunately, Dr. Hall never developed his original article.

In 1907, following riots in Brownsville, Texas, where members of the U.S. infantry opened fire, personnel at the Frankfort Arsenal were tasked with identifying which of the guns had been fired. As a method of identification, enlarged photographs of the firing pin prints on the shell casings were used. By this means, they were able to identify with certainty that of the 39 cartridge cases examined, 11 came from one gun, 8 from the second, 11 from the third and 3 from the fourth. The remaining six cartridges were not identified.

As for the recovered bullets, the examiners concluded that they did not bear any distinguishing marks relating to the weapon from which they were fired. The only conclusion reached was that after the rifling characteristics, the bullets were fired from either a Krag or a Springfield rifle.

Later, in 1912, Victor Balthazard made the next profound breakthrough in this science, making photomicrographs of bullet surfaces and grooves in an attempt to identify the weapon from which the bullet was fired. Following these examinations, he concluded that the cutting edge used to rifle a barrel never leaves exactly the same marks in its successive excursions through the barrel. These marks, which by inference must be unique to that barrel, are then imprinted as a series of striations on any bullet that passes through that barrel. Thus, he argued that it is possible to identify, beyond reasonable doubt, that a bullet fired came from the barrel of a particular gun and not another. The significance of Balthazard's work cannot be overstated, as the entire modern science of bullet identification is based on this premise.

In 1923, in the *Annales de Medicine Legale*, De Rechter and Mage published a paper discussing the advantages of using firing pin prints to identify the weapon used. Around the same time, Pierre Medlinger also noted the reproduction of minute irregularities of the breech face on the soft brass of American primers. However, the matter was not pursued further without mention of the possibility of identifying the weapon fired (Heard 2008, 148).

It was not until 1925 that a comparison microscope was first mentioned, which allowed simultaneous viewing of enlarged images of two bullets or cartridge cases for preliminary comparison. In an article published in the 1936 edition of the *Chicago Police Journal*, Calvin Goddard attributed the development of the comparison microscope to a Philip Gravelle in 1925 who claimed it was a development of the comparison microscope used by Albert Osborn for examining documents.

Leading forensic personalities

From another perspective, we believe that countless people can be mentioned in the course who have contributed to the evolution and progress of forensic science, an aspect to which we have sporadically referred above. Without, however, making an exhaustive list, we will briefly present some of the leading figures in this science, whose undeniable merit led to the emergence and development of this science (Saferstein 2011, 11).

Mathieu Orfila (1787-1853) is considered the father of forensic toxicology. A native of Spain, he eventually became a renowned professor of medicine in France. In 1814, Orfila published the first scientific treatise on the detection of poisons and their effects on animals. This treatise established forensic toxicology as a legitimate scientific endeavor.

Alphonse Bertillon (1853-19N14) devised the first scientific system for identifying people. In 1879, Bertillon began to develop the science of anthropometry as a systematic, distinct procedure of taking a series of body measurements as a means of distinguishing one individual from another. For nearly two decades, this system was considered the most accurate method of personal identification. Although anthropometry was eventually replaced by fingerprints in the early 1900s, Bertillon's early efforts earned him the distinction of being known as the "father of criminal identification."

Francis Galton (1822-1911) undertook the first definitive study of fingerprints and developed a methodology for classifying them. In 1892 he published a book entitled *"Fingerprints"*, which contained the first statistical evidence supporting the uniqueness of his method of personal identification. His work went on to describe the basic principles that form the current fingerprint identification system.

Leone Lattes (1887-1954) discovered in 1901 that blood can be grouped into different categories. These blood groups or types are now recognized as A, B, AB and O. The possibility of blood grouping being a useful feature for identifying a person intrigued Dr Lattes, a professor at the Institute of Forensic Medicine at the University of Turin in Italy. In 1915 he devised a relatively simple procedure for determining blood group from a dried blood stain, a technique he immediately applied to forensic investigations

Calvin Goddard (1891-1955) made a considerable contribution to ballistics. In order to determine whether a particular weapon fired a bullet, it is necessary to compare the bullet with one that has been tested with the suspect's weapon. Goddard, a colonel in the US Army, perfected the techniques of such an examination through the use of the comparison microscope. Goddard's expertise established the comparison microscope as the modern firearms examiner's best indispensable tool.

Albert S. Osborn (1858-1946) initiated and developed the fundamental principles of document examination and is credited with the acceptance of document examination as evidence by the courts. In 1910, Osborn authored the first major text in this field - *Questioned Documents.* This book is still considered a primary reference for document examiners.

Walter C. Mccrone (1916-2002) conducted research in forensic science in parallel with the amazing advances in sophisticated analytical technology. During his lifetime, however, McCrone became the world's foremost microscopist. Through his books and articles published in various journals, as well as his activities in various research institutes, McCrone was a tireless advocate for the application of microscopy to analytical problems, especially to cases investigated by forensic means. McCrone's exceptional communication skills have made him a much sought after instructor and he has been responsible for educating thousands of forensic scientists worldwide in the application of microscopic techniques. Dr. McCrone has used microscopy, often in combination with other analytical methodologies, to examine evidence in thousands of criminal and civil cases over a long and illustrious career (Saferstein 2011, 8).

Hans Gross (1847-1915) wrote the first treatise describing the application of scientific disciplines to criminal investigations in 1893, in which he used the concept of *"Criminalistics"*

for the first time worldwide. A public prosecutor and judge in Graz-Austria, Gross spent many years studying and developing the principles of criminal investigation. In his classic book *"Handbuch für Untersuchungsrichter als System der Kriminalistik"* (later published in English under the title *"Criminal Investigation"*), he detailed the assistance investigators could expect from the fields of microscopy, chemistry, physics, mineralogy, zoology, botany, anthropometry and fingerprinting. Subsequently, he founded and published the forensic journal *"Archiv für Kriminal Anthropologie und Kriminalistik"*, which still serves today as a medium for reporting improved methods of scientific crime detection.

Edmond Locard (1877-1966), a French citizen, demonstrated how the principles outlined by Gross could be incorporated into a functional forensic laboratory (in spite of the fact that Hans Gross was a strong advocate of the use of the scientific method in criminal investigation, but without making specific technical contributions to this methodology). Locard's formal education was in both medicine and law. In 1910, he persuaded the Lyon police department to give him two attic rooms and two assistants to set up a police laboratory. In Locard's early years, the only instruments available were a microscope and a rudimentary spectrometer. However, his enthusiasm quickly overcame the technical and monetary shortcomings he faced. From these modest beginnings, the research and results Locard arrived at were his major achievements that became known worldwide to forensic investigators. Eventually, he became the founder and director of the Institute of Criminalistics at the University of Lyon, which quickly developed into a leading international centre for forensic studies and research (Saferstein 2011, 8). From the results of his forensic work, some basic ideas stand out:

- from a forensic point of view, whenever two objects come into contact with each other, an exchange of materials takes place between them.
- when a person comes into contact with an object or a person, there is a cross-transfer of matter and materials (Locard's principle of exchange).
- each murderer can be linked to a crime committed by different particles transported from the crime scene.

After the First World War, Locard's successes served as an impetus for the formation of police forensic laboratories in Vienna, Berlin, Sweden, Finland and the Netherlands.

Dr. R. A. Reiss (1875-1929), a specialist in chemistry and physics at the University of Lausanne, contributed greatly to the use of photography in forensic science and established one of the world's first forensic laboratories, which served the academic community and the Swiss police. His interests included photographing crime scenes, corpses and bloodstains. In 1913 he made a trip to Brazil, where his forensic expertise was presented for the first time in the Western Hemisphere (Dillon 1977).

In Italy, *Dr. Salvatore Ottolenghi* (1861-1934) founded the Scientific Police School in Rome, designated as the world's first renowned school for training police officers in scientific techniques. He included training in physical evidence and established a laboratory to provide scientific analysis for the police in 1908. This laboratory served both the police in Italy and the city of Rome.

In England, *C. Ainsworth Mitchell* (1867-1948) was a public analyst primarily interested in "disputed" documents and ink chemistry in the early 20th century. His compatriot, *Robert Churchill*, a famous English gunsmith, carried out numerous examinations of firearms in many cases in England (Eckert 1997, 34). Inspired by the use of the comparison microscope in forensic science in the USA, he commissioned such a microscope and used it himself in his ballistic examinations (Heard 2008, 148).

Literary roots of forensics

It is a universally acknowledged fact that art and literature have influenced forensic science to such an extent that one can speak of the *"literary roots"* of *forensic* science (Saferstein 2011,

11), more specifically the *forensic novel*, which focuses more on the forensic investigation, i.e., the forensic methods, techniques and tactics used and less on the analysis of the criminal (which is of particular interest to criminology).

More often than not, the criminal is left in the background and his role exists more to stage a mysterious crime. The focus is mainly on the emotional description of how the crime is discovered and the struggle between the prosecution and the defense, or the moral struggle and the legal mechanism that makes it possible to punish the offender (Pop 2020, 291).

A prime example is the work of *Agatha Christie* (1890-1976), the best-selling novelist of all time. She is known for her 66 crime novels and 14 collections of short stories, as well as the world's longest-running play - *"The Mousetrap" (*https://www.agathachristie.com/en/about-christie#discover-more*)*. It has been estimated in literature that Agatha Christie's novels are the most published of all time, second only to the Bible and the works of Shakespeare (Monico 2021, 7). The detectives created by the author are constrained by technology, resources and the criminal justice system of the 1900s. These are mainly Hercule Poirot and Miss Marple, his most popular detectives.

Hercule Poirot is Agatha Christie's most famous detective. Often described as a small man with a big ego and an even bigger moustache, Poirot is everything most readers want from a traditional detective. As a retired Belgian police officer, Poirot brings with him years of experience. Although his methods are not always conventional, he is able to use what he describes as "little grey cells" to arrive at answers that no one else could have reached.

In his investigations, Poirot is accustomed to going to the scene of the crime after he has learned the general details of the criminal event. For example, in *The ABC Murders*, he returns to the scene of the crime at 5:30 p.m. because he "wants to reproduce as closely as possible the atmosphere of yesterday." This also speaks to his practice of uncovering the psychology of the killer. While investigating the Andover crime scene, he considers every detail, asks questions of other investigators to whom the crime was first reported, and also considers whether fingerprints were found, as the science and technology to process other types of DNA were not accessible.

In many cases, such as the one in *Murder on the Orient Express*, Poirot is the first investigator on the scene, so the body has not been touched until then. While examining the crime scene, "Poirot's eyes roamed the compartment; they were bright and sharp as a bird's; one felt that nothing could escape their scrutiny." Poirot is known for his meticulous examination of crime scenes, as he leaves no witness unquestioned and no shred of evidence overlooked. Poirot's way of uncovering evidence at crime scenes would not be considered inadmissible in a court of law. On the other hand, Agatha Christie also created *Miss Marple*, who is a very independent woman. She is an older, unmarried woman who lives in a small English village. Unlike Poirot, she has no formal detective training and uses only her natural nosy tendencies, observational skills, intuition and feminine knowledge to solve crimes.

Unlike Poirot, Miss Marple is almost never the first investigator to arrive at the scene of a crime. In fact, she sometimes has to force herself to see the crime scene, as she is not a traditional detective, although one might say this is because she is a woman. In *The Body in the Library*, when Miss Marple is told that "I'm afraid no one is allowed in", her friend responds with, "You know Miss Marple very well. It's very important that she sees the corpse". At the actual crime scene, Miss Marple doesn't seem to make many observations to share with those around her. In *A Caribbean Mystery*, Miss Marple never actually gets to see the crime scenes or the bodies associated with the victims' deaths, so this critical piece of the investigative procedure is missing for her. Instead, she contacts the coroner each time to try to reconstruct the cause of death, which is said to be the next step in the investigative procedure.

In fact, Agatha Christie's novels focus on the actual investigation of the crime, rather than the prosecution of the perpetrator to follow. In addition, there were no computers at the time of the novels. So, in this respect, both Poirot and Marple were at a disadvantage, as "conducting

computer checks on suspects in a homicide increases the likelihood of their release" (Braga 2019, 343). Although it may have increased the rate of solving cases, both Poirot and Marple would have been equally successful without the use of modern technology now available to investigators to profile suspects. The next step Poirot usually takes is interviewing potential witnesses. The best example of this is The Murder on the Orient Express, in which he talks to every person who had access to the train car where the murder took place. Miss Marple uses gossip as an interviewing tool and this can be considered a substantial part of her investigative procedure. She does not use ordinary interviewing techniques as this would arouse suspicion from others.

Science and technology are almost non-existent in the investigation of the two detectives, as mentioned. Poirot occasionally makes references to dusting for fingerprints, as in *Murder on the Orient Express,* when he goes over the crime scene, specifically the window frame, blowing dust he had in his pocket over it. This is about the only scientific evidence that could immediately link a suspect to a crime scene. Miss Marple avoids the scientific route altogether, choosing to focus on the strengths that being a Victorian gives her. The closest she comes to DNA is in *The Body in the Library,* when she notes that the fingernails of the corpse in the library could not be Ruby Keene's (Monico 2021, 7). In all the novels, Poirot manages to get a confession from the perpetrator or perpetrators. With the exception of the novel Cortina, he also has witnesses to these confessions. Miss Marple, on the other hand, has shown that she is able to prove attempted first-degree murder. There have also been instances when Miss Marple has caught criminals attempting to commit another crime, as in *The Body in the Library* and *A Caribbean Mystery.*

Another eloquent example is *Sir Arthur Conan Doyle* (1859-1930) who also had considerable influence in popularizing scientific methods of crime detection through his fictional character *Sherlock Holmes* and who first applied the newly developed principles of serology, fingerprinting, firearms identification and examination of questioned documents long before their value was first recognized and accepted by real-life criminal investigators. The exploits of Detective Holmes sparked the imagination of a new generation of criminologists and criminal investigators. Even in Sir Arthur Conan Doyle's first novel - *A Study in Scarlet,* published in 1887 - we find examples of the author's extraordinary ability to describe scientific methods of detection years before they were discovered and put into practice. For the court, Holmes investigates and acknowledges the potential usefulness of *forensic serology* in the forensic field. So does *microscopic examination for blood corpuscles*. Apparently, such an examination is worthless if the stains are hours old. However, the new test introduced by this examination seems to work equally well whether the blood is old or new. If this test had been invented earlier, many people would have been punished for their crimes and would not have got away scot-free for lack of evidence, as happened until this new test was introduced.

There are many criminal cases that are still based on this scientific method. A man is suspected of a crime months after it was committed. His underwear or clothes are examined and brown stains are discovered on them. Are they blood stains, rust stains or fruit stains, or what are they? This is a question that has puzzled many experts, along with the question 'why'? Because there has been no reliable test. Now we have the Sherlock Holmes test and there will be no more difficulty (Saferstein 2011).

In conclusion, Sir Arthur Conan Doyle's legendary detective Sherlock Holmes applied many of the principles of modern forensic science long before they were widely adopted by the police. Last but not least, another landmark example, emblematic of forensic tactics and methodology, is the investigation carried out by Porphyry Petrovich, examining magistrate and crucial figure in Feodor Mikhailovich Dostoyevsky's novel *Crime and Punishment*. Dostoevsky describes Porfiri in great detail, sketching his portrait in just four sentences: "He was a man of about thirty-five, not quite medium height, full-bodied and fat, clean-shaven, without a moustache or burns, with close-cropped hair on a long, round head that stuck out quite well at the back..." Although Porfiri

Petrovich's role appears in the novel quite late (part three) and is relatively short (60 pages), it is a central one. With boundless energy, he always puts Raskolnikov - the perpetrator - in the shade. The investigator's attention to detail and his deft questioning reveals his intellect, psyche and faith. Porphyry Petrovich solves the mystery of Raskolnikov's murder and, most importantly for the novel, helps the murderer endure the torment of guilt and confession to his new life with Christ (Naumann 1972, 42). Porphyry Petrovich seems like a nice guy despite Raskolnikov's serious crime. The investigation proceeds on several levels, some seemingly insignificant, asking Raskolnicov, for example, to declare his assets (given that the murder victim owned a pawnshop) or asking him to write an essay on crime and morality. The answers provided gave Porphyry Petrovich a deep insight into Raskolnikov's character and revealed his conviction of his guilt, causing him to reconcile the psychological gap between his ideas and the deed committed; the tactics adopted also made it difficult for Raskolnikov to control and restrain himself, as he was simply thrown into an inner conflict. All this culminates in Raskolnikov's confession to the crime, urging him to "honor the gift of life by looking beyond prison" (Study Guide about *Crime and Punishment* - Dostoevsky 1866).

Forensic laboratories

Before the establishment of specialized laboratories, police in many parts of the world relied on the scientific assistance of people whose occupations enabled them to provide the necessary expertise. In the absence of a centralized system, it was a problem to know who to turn to, which initially led to the formation of formalized institutions, which were almost invariably set up as parts of universities or hospitals. As they became limited over time to examining and providing expertise in a limited number of forensic disciplines, police forces took the step of developing *their own forensic laboratories.* These labs dealt with the examination of physical, material evidence relating to the circumstances of the crimes, the victims and the perpetrators. Forensic findings made in a laboratory were and are used together with other forensic science and criminal investigation findings to prepare evidence for a court proceeding or trial.

Europe took the lead in this development, with the first police forensic laboratory being opened in 1910 in Lyon, France, following the initiative of Edmond Locard, referred to above. Following his model, police laboratories subsequently appeared in Germany (Dresden, 1915), Austria (Vienna, 1923) and other countries, including the Netherlands, Finland and Sweden, the last three of which became operational in 1925.

This transition to forensic laboratories did not occur in the United States of America (USA) until 1923, when the Los Angeles Police Department established its own forensic laboratory. Failure to obtain an indictment in a case due to improper handling of evidence prior to laboratory examination was the reason for this change. Many other police departments in America followed suit, with the Federal Bureau of Investigation (FBI) laboratory opening in 1932 (White 2004).

Conclusions

In conclusion, forensic science has evolved in a way that has been closely linked to the progress of science, and to speak today of improving methods and techniques in such a science is not possible without knowing their evolution. This is all the more necessary given that today's threats are increasingly complex and atypical, which requires a high capacity for adaptation and rapid reaction on the part of criminologists too.

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The Emergence and Evolution of the Legal Institution of Possessio in Roman Private Law

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ABSTRACT: The legal figure of the possession was born in the process of exploiting the lands in the *ager publicus.* In very ancient times, the patricians were shepherds and farmers. As the founders of Rome, they had access to the exploitation of the lands of the state. They often sublet part of these lands to their clients, who, at some point, refused to return the lands to them and endangered the rule exercised by the *patres*. Rome was a patrician state and that is why the fast legal protection of *possessiones* was required. Therefore, the *imperium* of the magistrates was resorted to and the interdicts of the possessors were created. Later, against the background of the development of legal ideas and the evolution of society, the effects of the *interdicta* were extended to other situations and contributed to the improvement of the legal protection of private property rights.

KEYWORDS: *possessiones, animus, corpus, interdicta*

The emergence of the concept of *possessio*

Possessio was a state of fact protected by law (Gaudemet and Chevreau 2009, 229). Initially, it was a simple possession of the land, which had nothing to do with the right of quiritary property and which was not protected from a legal point of view. Against the background of the evolution of legal ideas, the Romans noticed the fact that *possessio* and quiritary property were exercised by the same means, which made them understand that *possessio* represented the external manifestation of the property right.

In ancient times, *possessio* was designated by the term *usus*, because it included the use of the thing. Later, it was designated by the term *possessio*, which has its origin in the practice of the Patricians to subconcede the lands received from the *ager publicus*. *Ager publicus* (public field) was the public property of the Roman State, which was also fed with the lands that the Roman state conquered from its enemies. Since the Romans were a nation of shepherds and farmers, lots from the public field were assigned for use by the Patricians free of charge or for a fee. Thus a legal relationship was concluded between the state, which had the quality of owner, and the Patrician, who had the legal status of a tenant (Hanga and Bocşan 2006, 175).

The mentioned lots were called *possessiones* and were assigned to the Patricians, on the condition that they cultivate them with their own families. This practice continued and resulted in the fact that the Patricians acquired a lot of land, which they could no longer exploit with their own labor. Therefore, they started to sub-concession a part of the lots to their clients (Molcuț 2011, 110). In the very ancient era, the Patricians had at hand effective legal procedures that stemmed from the patronage relationship, with the help of which they could revoke the concessions made to the clients. Over time, however, patronage relations deteriorated, and the patrons lost the authority they had exercised over the clients. The consequence was that the clients often refused to leave the lands at the request of the patrons; under these conditions, the state of affairs between the patron and the client was not legally protected, proof that the patrons no longer had legal procedures available to compel the clients to return their land. In order to solve the problem and protect the patrons, the Roman jurists created *de precario interdictum* (Minculescu 1935, 62). The interdict placed at the patron's disposal results from the *imperium* of the magistrate. From this moment on, the control exercised by the patricians over the public

lands is no longer a simple state of fact, but becomes a state of fact protected by law.

Later, as the Romans acquired social and legal experience, they realized that they were in the presence of *possessio* and in other situations than the original one. That is why they extended the application of the *interdicta possessoria* also in the matter of private property, which is why *possessio* has become generalized.

Elements of *possessio*

According to the Digests of Emperor Justinian, possessio has two elements: *animus* and *corpus (apiscimur possessionem corpore et animo, neque per se animo aut per se corpore)* (Mommsen 1870, 504).

Animus denotes *rem sibi habendi* (the intention to keep something for oneself) (Tomulescu 1973, 167). Since *possessio* was the expression of ownership, the possessor behaved identically to the owner.

Corpus denotes the totality of material acts through which control over something is achieved (Axente 2021, 140). This results expressly from another work of the Jurisconsult Gaius, *Res cottidianae*, according to which *interdum etiam sine traditione nuda voluntas domini sufficit ad rem transferendam, veluti si rem, quam commodavi aut locavi tibi aut apud te deposui, vendidero tibi: licet enim ex ea causa tibi eam non tradiderim, eo tamen, quod patior eam ex causa emptionis apud te esse, tuam efficio* (Mommsen 1870, 490).

Categories of *possessio*

Roman legal texts have given us information about several categories of possessio: *possessio ad interdicta*, *possessio ad usucapionem*, *possessio iniusta* and *possessio iuris.*

Possessio ad interdicta is *possessio* defended by *interdicta possessoria*. *Possessio ad usucapionem* is the *possessio* that has the effect of acquiring the property through *usucapio*. *Possessio iniusta* is vicious *possessio*. As its name suggests, it does not provide legal protection to the person exercising it. *Possessio* was clandestine when a person possessed the thing without the knowledge of the owner. *Possessio* was vitiated by violence when, for example, it had been acquired by force. *Possessio* was vitiated by precariousness when a person did not possess the thing for himself, since he had to return it to the owner. *Possessio iuris* was the possession of a right.

Effects of *possessio*

Initially, possession was a simple state of fact, which did not produce legal effects. Along with the evolution of legal ideas, this situation changed, in the sense that the possessor enjoyed certain advantages.

First, the possessor was legally protected by interdicts. These were the main methods of legal protection of *possessio*. They were orders that the praetor gave by virtue of his *imperium* and whose purpose was to maintain an existing possessio or recover a lost *possessio (interdicta uero, cum prohibet fieri, uelut cum praecipit, ne sine uitio possidenti uis fiat, neue in loco sacro aliquid fiat. unde omnia interdicta aut restitutoria aut exhibitoria aut prohibitoria uocantur)* (Girard 1890, 283). In other words, interdicte protect one whose *possessio* is disturbed or who has been unjustly dispossessed.

Another effect of possessio consists in the fact that the possessor has the capacity of defendant in the event of a *rei vindicatio*. *Rei vindicatio* is the legal action by which the property right is sanctioned. It was filed by the non-possessor owner against the non-proprietary possessor. The possessor's position was advantageous in *rei vindicatio*, because he did not have to prove that he was the owner; simply, he defended himself by saying *possideo quia possideo*

(I possessed because I possessed). Instead, the burden of proof rested with the applicant by virtue of the *actor incumbit probatio* principle.

Another effect of *possessio* is that possession can lead to the acquisition of ownership through *usucapio*. As we will see, mere possession is not enough for the *usucapio* to operate; it had to be accompanied by other elements: the term, the existence of something susceptible to usufructuring, *iusta causa* and good faith.

Legal protection of *possessio*

The legal protection of the *possessio* was ensured by means of *interdicta possessoria*. They were not legal actions, but administrative procedures through which the praetor could resolve certain disputes based on his *imperium*. These legal procedures presented the advantage that they ensured the protection of property rights in situations that did not fall within the scope of the *rei vindicatio*. *Rei vindicatio* could be brought successfully only when the owner was dispossessed of the work; it was ineffective when someone disturbed the *possessio* exercised by the owner or where the owner was in danger of being unlawfully dispossessed.

The *interdicta* did not definitively resolve disputes regarding *possessio*. The final solution was pronounced by the judge only after the organization of a claim process, which aimed to identify the person who had the capacity of owner.

Interdicta possessoris were of three types: *interdicta recuperandae possessionis causa* (for the recovery of a lost possession), *interdicta adipiscendae possessionis causa* (for the acquisition of a *possessio* that the interested party had not had until then) (Cătuneanu 1927, 218) and *interdicta retinendae possessionis causa* (to preserve an existing *possessio*). *Interdicta recuperandae possessionis causa* were of three types: interdicta *unde vi, interdicta de precario* and *interdicta de clandestina possessione.*

Justinian's Institutes send us valuable information about *unde vi interdicta.* According to this Roman legal monument, *"nam ei proponitur interdictum unde vi, per quod is qui deiecit cogitur ei restituere possessionem, licet is ab eo qui vi deiecit vi vel clam vel precario possidebat. Sed ex sacris constitutionibus, ut supra diximus si quis rem per vim occupaverit, si quidem in bonis eius est. Dominio eius privatur, si aliena, post eius restitutionem etiam aestimationem rei dare vim passo compellitur. Qui autem aliquem de possessione per vim deiecerit, tenetur lege Iulia de vi privata aut de vi publica: sed de vi privata, si sine armis vim fecerit, sin autem cum armis eum de possessione expulerit, de vi publica. 'armorum' autem appellatione non solum scuta et gladios et galeas significari intellegimus, sed et fustes et lapides"* (Hanga,2002, 315-316). From this source of law it follows that the *unde vi* interdicta was of two kinds: *unde vi cottidiana* and *unde vi armata* (Tellengen-Couperus 2008, 492).

Interdicta *unde vi cottidiana* were granted to possessors who had been dispossessed by violence. In order for this interdict to be filed successfully, two conditions had to be met: not a year had passed since the dispossession, and the dispossessed person had not exercised a defective possession at the time of the *interdicta*. *Interdicta unde vi armata* were granted in the case of dispossession by armed violence. They were created in the 1st century BC, against the backdrop of civil wars. In Justinian's time, *unde vi interdicta* were merged into a unique interdicta, *interdictum momentariae possessionis*.

De precario interdicta est quod precibus petendi ad utedum conceditur tamdiu, quamdiu ille qui concessit patitur (Cătuneanu 1927, 222). It was created in connection with the exploitation of public land and was used by the patricians against the client who refused to return the plot of land received by way of use. Later, this interdicta was applied in other cases as well (Minculescu 1935, 62-63).

De clandestina possessione interdicta (concerning clandestine possessio) was filed against the person who possessed something without the knowledge of the owner. It had its origin in certain customs related to shepherding. The ancient Romans had winter and summer

pastures. In the summer they took the herds to graze in the mountains, and in the winter to the plains. This practice could generate certain inconveniences. Once returned from the mountain pastures, the owner could find someone else who possessed the plain pasture, who could reason that the *possessio* had been lost with the *corpus*. In order to avoid such consequences, the praetor granted the *de clandestina possessione interdicta*, on the grounds that the possessor had occupied the land without the knowledge of the owner.

The interdicta *retinendae possessionis causa* aimed to preserve an existing *possessio* (Axente 2020, 221). Gaius tells us that *"retinendae possessionis causa solet interdictum reddi, cum ab utraque parte de proprietate alicuius rei controuersia est et ante quaeritur, uter ex litigatoribus possidere et uter petere debeat. Cuius rei gratia comparata sunt UTI POSSIDETIS et UTRUBI. Et quidem UTI POSSIDETIS interdictum de fundi uel aedium possessione redditur, UTRUBI uero de rerum mobilium possessione"* (Girard 1890, 284).

The *utrubi interdicta* (which of two) was filed for movable things (Cuciureanu 2021, 117). Gaius gives us valuable information about these *interdicta*. According to the great classical jurisconsult, *"sed in UTRUBI interdicto non solum sua cuique possessio prodest, sed etiam alterius, quam iustum est ei accedere, uelut eius, cui heres extiterit, eiusque, a quo emerit uel ex donatione aut dotis nomine acceperit. Itaque si nostrae possessioni iuncta alterius iusta possessio exsuperat aduersarii possessionem, nos eo interdicto uincimus. Nullam autem propriam possessionem habenti accessio temporis nec datur nec dari potest. Nam ei, quod nullum est, nihil accedere potest. Sed et si uitiosam habeat possessionem, id est aut ui aut clam aut precario ab aduersario adquisitam, non datur accessio; nam ei possessio sua nihil prodest. 152. Annus autem retrorsus numeratur. Itaque si tu uerbi gratia VIII mensibus possederis prioribus et ego VII posterioribus, ego potior ero, quod trium priorum mensium possessio nihil tibi in hoc interdicto prodest, quod alterius anni possessio est"* (Girard 1890, 284).

The interdicta *uti possidetis* (as you possess) was filed to retain possessio of real estate. According to Justinian's Institutes, *"sed interdicto quidem uti possidetis de fundi vel aedium possessione contenditur, utrubi vero interdicto de rerum mobilium possessione. Quorum vis et potestas plurimam inter se differentiam apud veteres habebat: nam uti possidetis interdicto is vincebat qui interdicti tempore possidebat, si modo nec vi nec clam nec precario nanctus fuerat ab adversario possessionem, etiamsi alium vi expulerat aut clam abripuerat alienam possessionem aut precario rogaverat aliquem, ut sibi possidere liceret"* (Hanga 2002, 313-314). Therefore, this *interdicta* was granted to the person who possessed the thing at the time of its release. Initially, the magistrate issued the *interdicta uti possidetis* for land, later also for houses, because the Romans did not know real estate advertising, and this fact was likely to cause confusion in relation to the ownership of property.

The interdicta *adipiscendae possessionis causa* had been created for the acquisition of a *possessio* that did not yet exist (Axente 2022, 216). The most important *interdicta* in this category were the *quorum bonorum* interdicta, the *Salvian* interdicta and the *possessorium* interdicta. The *quorum bonorum interdicta* aimed at acquiring the inheritance and was granted to the person trying to obtain *possessio* for the first time *"ideo autem adipiscendae possessionis vocatur interdictum, quia ei tantum utile est qui nunc primum conatur adipisci rei possessionem"* (Girard 1890, 685). The *Salvian interdicta* was granted by the praetor to the landowner in order to acquire *possessio* of the lessee's movable assets, which were pledged to him for the payment of the lease (Ciucă 1999, 443). The interdicta *possessorium* was the legal procedure available to *emptor bonorum (bonorum quoque emptori similiter proponitur interdictum, quod quidam possessorium uocant)* (Girard 1890, 284).

Conclusions

Possessio had an important role in the development of Roman Private Law. If, initially, it was found in the sphere of relations between patrons and clients and represented the result of the

legal protection of the rule over the land exercised by the patricians, later it was applied to other situations as well. The development of society and the accumulation of legal experience made the Romans understand that ownership is manifested through the legal institution of possessio and that the legal protection of possessio optimizes the legal regime of private property. The generalization of this legal figure was bonum omen and turned possessio into one of the fundamental pillars of the legal order.

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