

THE NEWSLETTER ON
RESULTS
OF SCHOLARLY WORK

IN SOCIOLOGY, CRIMINOLOGY, PHILOSOPHY AND POLITICAL SCIENCE

EXAMINING
THE HARAKTERNIK
PHENOMENON:
A CRIMINOLOGICAL ANALYSIS

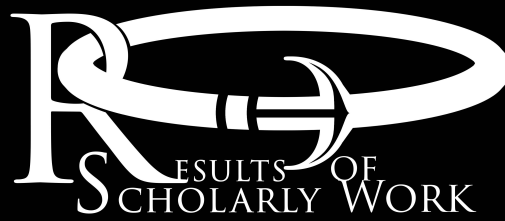
■ 'NDRANGHETA
HAS NO CRISIS

■ SOCIOLOGICAL
PERSPECTIVES
ON A PANDEMIC

THE AUTHORS
OF THE EUROPEAN PSYCHOPATHIC
EPIDEMIC

■ CYBERCRIME
AS THE NEWEST
PHENOMENON





CRIMINOLOGICAL ANALYSIS OF THE PHENOMENON OF HARAKTERNIKS IN THE UKRAINIAN CULTURE

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The journal's current issue is dedicated to one of the most mystical aspects of Ukrainian culture — the phenomenon of Harakternik. Within the framework of this issue, our authors conducted a detailed criminological analysis of the Harakternik phenomenon. Papers in the current issue delve into the prototypes of Harakterniks throughout the history of Ukraine.

The issue also explores the realm of cybercrime as a novel aspect of modern society and criminological study. These articles specifically address events related to the pandemic, scrutinizing how they were depicted in the media and the underlying reasons. Sociological observations regarding the pandemic's impact on individuals' lives are thoroughly examined, exploring why it did not significantly influence criminal structures. The Ndrangheta is utilized as an illustrative example in this context. Furthermore, the analysis extends to include an exploration of the concept of a "killer" across different regions.

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EXAMINING THE HARAKTERNIK PHENOMENON

A CRIMINOLOGICAL ANALYSIS

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ABSTRACT

This article delves into the intriguing phenomenon of “Harakternik” within Ukrainian culture, specifically its significant role in the southern Ukrainian tradition, which later became criminal. Harakternik, often shrouded in mystique, holds a unique place alongside other renowned facets like Cossacks, Chumaks, and Haydamaks. Drawing parallels between the southern Ukrainian tradition and the Italian ‘Ndrangheta, the study highlights their shared characteristics in criminal activity, focusing on the ‘Ndrangheta’s resemblance to the harakternik tier. The article also explores literary works that depict the criminal landscape in Odessa, showcasing characters like Cherven, Krasavchik, and Ostap Bender. Overall, it provides a fascinating insight into the intertwining of culture, history, and criminality in the southern Ukrainian tradition.





Keywords

Harakternik, Southern Ukrainian tradition, 'Ndrangheta, criminal tradition

INTRODUCTION

Harakternik constitutes not only the utmost mystical and enigmatic phenomenon within Ukrainian culture but also stands as an inseparable facet of the southern Ukrainian heritage, renowned for its other notable manifestations such as Cossacks, Chumaks, and Haydamaks. Contemporary scholarly discourse is more focused on other areas of Ukrainian studies (Davydchuk et al., 2018; Kappeler, 2014; Korostelina, 2013). Therefore, the topic raised in this article will be a wonderful addition to the understanding of Ukrainian culture and heritage.

In the context of the “Ukrainian lihva”, which denoted the southern Ukrainian tradition within the pre-revolutionary Russian empire prior to the events of 1917, the scholarly cohort led by Academician Oleg Maltsev arrived at the deduction that this tradition, when examined from a criminological standpoint, bears striking resemblance to the globally recognized Italian criminal syndicate — ‘Ndrangheta. ‘Ndrangheta, originating from the Calabria region in southern Italy, boasts an extensive historical lineage, persisting as one of the most affluent and expansive criminal organizations worldwide. It is worth noting that the criminality of Southern Italy is of research interest for various studies (Lavorigna & Sergi, 2014 see also Calderoni et al., 2020; Catino, 2015; Craparo et al., 2018; Nese et al., 2018).

Antonio Nicaso, an Italian professor renowned for his expertise in criminology, advisory roles to governmental bodies, and consultations with law enforcement agencies of multiple nations concerning matters of organized crime, expounded upon the ‘Ndrangheta within his work titled “Blood Brothers” (“Fratelli di sangue”), co-authored in partnership with Nicola Gratteri (Gratteri & Nicaso, 2010). Nicaso’s depiction of the ‘Ndrangheta is articulated as follows: having grown discreetly, the ‘Ndrangheta stands today as the most dreaded, powerful, and extensively pervasive criminal organization. Regrettably, within the Italian context, no other entity is presently capable of achieving comparable rates of profit escalation. Boasting a turnover of approximately 44 billion euros — exclusive of proceeds derived from money laundering — the ‘Ndrangheta epitomizes the zenith of opulence, aggression, and infiltration prowess. It has excelled in permeating the economy and various institutions, positioning itself as an unparalleled and truly globalized conglomerate. With its subsidiary establishments spanning across nearly every region of Italy, as well as extending its presence throughout Europe, Africa, Asia, the Americas, and Oceania (Nicaso et al., 2014).

As the primary focus of this article is not centered on an in-depth exploration of the ‘Ndrangheta itself or an exhaustive comparative examination with the southern Ukrainian tradition, a solitary parallel shall be proffered pertaining to the four tiers of training within both the ‘Ndrangheta and the southern Ukrainian tradition. The pinnacle tier of training within the ‘Ndrangheta is designated as “santos” (saint), which correlates to an analogous

tier within the southern Ukrainian tradition titled “harakternik”. Three additional strata of training ensue in each respective tradition, with an intricate comparative analysis reserved for forthcoming articles (Maltsev, 2014).

METHODOLOGY

In examining the phenomenon of Cossacks-harakternik, our research is grounded in a heuristic model that incorporates a dual verification approach, allowing for the consideration of additional evidentiary types that either validate or refute specific aspects under investigation.

Let us delve into the logical construction of the heuristic model utilized in our study. We took into account robust scientific characteristics and evidence to form the basis of this model. The following factors, derived and substantiated during our research, contribute to the model’s development. These facts are tangible rather than abstract, supported by field research conducted in various countries such as Italy, Germany, Mexico, etc. Our approach involved analyzing diverse sources, linguistic scrutiny, and investigating the cultural heritage of different nations.

1. Numerous references to the Cossacks in foreign sources, including Polish, German, and Italian documents.
2. Historical fact: the Zaporizhian army’s participation in the Holy League for over 290 years.
3. Presence of words in the Ukrainian language originating from Polish, German, and Russian.
4. Discovery of architectural monuments in various European cities, such as Heidelberg, Rothenburg, Vienna, Spyre, and the island of Malta, showcasing similar people with identical external characteristics and typology of appearance across Western Europe. The prevalence of these artifacts in sculpture emphasizes the cultural significance of these individuals in the life of other countries.
5. The word “harakternik” is pronounced similarly in Ukrainian, Russian, Italian, German, and Polish.
6. Exploration of the subculture of Calabria reveals the existence of approximately eight similar

Cossack Republics, each flourishing during different historical periods.

7. Noteworthy is the existence of various works of art, including paintings and frescoes, depicting Ukrainian Cossacks. Significantly, these cultural and artistic sources are authored by European masters from Italy, Germany, and other countries.

All these pieces of evidence lead us to posit that the phenomenon of Cossack-harakternik is not confined to Ukraine alone but holds international significance. Consequently, research confined solely to the territory of Ukraine and neighboring countries may lack completeness and reliability, given the broader scale of this phenomenon. In this context, our reliance on sources spanning the XVI to XX centuries is crucial.

The facts presented in this article form the basis for constructing a heuristic model with a dual verification status. Utilizing both the method of similarity and the prototypical comparison method, we have devised the following heuristic model. According to the model, we compare phenomenon “X” with various points (facts, phenomena) worldwide, simultaneously comparing these points in a circular manner, and concurrently assessing them in relation to the studied phenomenon “X”. This approach ensures a double verification process.

The enumerated sources of evidence, as mentioned earlier, serve to corroborate or challenge hypotheses and conclusions derived from the heuristic model during the research. The list of sources can additionally function as a third tier of verification for the obtained data, collectively forming the fourth tier of verification.

The heuristic model, as derived, lacks a rigid algorithmic sequence, allowing for modification and extension. Introducing additional points for comparison and undertaking subsequent stages of scientific research and verification are possible. For instance, other scientists may have already investigated the same data blocks, points, or phenomena and have their scientific results and proven conclusions, serving as additional sources for data analysis and verification.

Many researchers have explored the Calabrian ‘Ndrangheta subculture, as well as the cultural and religious-philosophical aspects of the Rhineland (Germany), Mexico, and Southern Italy. By comparing their findings with our own, we establish a fourth echelon of validation in our heuristic model. This model incorporates a double verification factor, with the third echelon relying on evidence sources used to construct the hypothesis, and the fourth echelon involving the works of other scientists who have delved into related phenomena. Implementing this heuristic model involves subjecting each fact to verification four times, minimizing the probability of error.

The chosen comparative methodology compares all selected “points” with the main cultural source — the cultural heritage of the Cossack-hakhternik in Ukraine — and evaluates all points of other spatial certainty against each other. The methodology presented facilitates the construction of verifiable hypotheses through a hypothetico-deductive approach. It draws from an understanding of the common social and functional orientation and archetypal similarity found in the collective unconscious cultural image. This commonality is further illustrated and defined in the comparison of historical artifacts, serving as evidence to determine the similarity or dissimilarity of social phenomena. In the unity of the common, the particular, and the singular.

To conduct a comparative analysis of two similar phenomena in relation to their structural and functional orientation, it is imperative to initially identify a comparative object. Additionally, defining the essential criteria for comparison becomes crucial, enabling the differentiation between the common, the particular, and the singular aspects of these phenomena. Hence, the heroes from Calabria emerge as the most closely aligned in terms of mythologization, frequency of miracles, adeptness in survival, and proficiency in addressing intricate military and social challenges. Given their exposure to mandatory extreme conditions and an overall extreme existential backdrop, these Calabrian heroes have been selected as the focal point for our comparative analysis. While acknowledging the potential for radical differences, similarities in specific properties and attributes, or even com-

plete identity, can only be determined through the process of comparison. An essential prerequisite for this evaluation is a comprehensive source base that aids in discerning the content and form of the designated phenomenon.

Conducting research in Calabria poses unique challenges, particularly regarding the ‘Ndrangheta, which is often presented as a criminal community. In academic studies of the Calabrian subculture, notable researchers like Antonio Nicaso et al. (2014), Nicola Gratteri, and Arcangelo Badolati (2017) heavily rely on court records as their primary information source. While these works contribute significantly to ‘Ndrangheta studies, it is crucial to acknowledge that court records come with inherent compromises, viewed from an advocacy standpoint. Suspects may provide data during pre-trial investigations or court proceedings that favor their situation, potentially leading to a skewed representation. Moreover, even if a convicted person is later acquitted, the court verdicts, which may contain inaccuracies, persist in archives as sources of information. This issue has been observed in organized crime trials in Southern Italy.

The study employs an inductive method of proof, incorporating the hypothetico-deductive approach within a dialectical unity of induction and deduction. Unlike deduction, where a hypothesis is initially formed in the abstract and evidence is subsequently sought, the inductive method constructs the hypothesis based on existing evidence.

RESULTS

In the contemporary context, Cossacks, Chumaks, and Haydamaks have not only significantly influenced the culture and traditions of their region but have also come to symbolize national and cultural identity, particularly in Ukraine. Their impact is deeply ingrained in the national history and folklore of Ukraine. Cossack dances, songs, and customs continue to be preserved in Ukrainian culture. Chumaks are depicted in folk tales, songs, and beliefs, reflecting labor traditions and ways of life. Haydamaks have become symbols of resistance and the struggle for freedom. Throughout historical events such as the Grand Duchy of Lithuania

and Khmelnytsky Uprising, Cossacks, Chumaks, and Haydamaks played pivotal roles, shaping the history of the region. Their influence extends to literature, painting, and various forms of art, with artists and writers capturing their vivid and multifaceted images. In modern Ukraine, these figures have become emblematic of freedom, resistance, and heroism, contributing to the nation's identity. Their images are featured in national symbols, emblems, and other expressions of Ukrainian culture. Numerous historical sites associated with them attract tourists, while monuments, museums, and reserves work to preserve the rich historical heritage of the Cossacks, Chumaks, and Haydamaks, fostering an appreciation for the history and culture of the region. Thus, these figures are not merely historical phenomena; they are integral parts of the cultural heritage that has shaped the traditions, symbolism, and national identity of the region.

From a criminological vantage point, the southern Ukrainian tradition, akin to the Italian 'Ndrangheta, mirrors an identical structure for orchestrating banditry, thereby elevating banditry to a professional framework. This transformation transpires when a "bandit" evolves into a professional by assimilating the skillset of a seasoned military operative, thereby transcending the designation of mere banditry or militarism to attain the stature of specialized forces. Examining the historical trajectory of the 'Ndrangheta's genesis, it becomes apparent that, during a specific juncture, while situated within territory influenced by the emerging new governance, it underwent a transition into criminality. Initially, the 'Ndrangheta operated as the Order of Christ. However, with the onset of Italy's unification in 1861, this Spanish order encountered a circumstance of abandonment within the Italian territory, rendering it in a state of occupation (Gratteri & Nicaso, 2010).

The intricate juncture in the historical narrative of the 'Ndrangheta, examined through the lenses of psychological and criminological perspectives, is eloquently elaborated upon in the scholarly monograph titled "Philosophy of Southern Italy" (Maltsev & Lunov, 2020): "As we delve into the stages traversed in the historical evolution of the 'Ndrangheta, a pivotal moment that profoundly influenced its trajectory and shaped its essence

emerges when the 'Ndrangheta found itself ensnared within occupied territory, entangled in a state of isolation. This circumstance even led to a double isolation. It can be likened to an individual abruptly awakening as a criminal one morning. For the purpose of illustration, a specific article of the Criminal Code was adopted one day which delineates an individual as a criminal, based on attributes such as having brown eyes or being of Jewish descent, for instance. Consequently, within a single fleeting moment, an extensive group or community became criminals. This particular occurrence significantly contributed to what is commonly referred to as "in-group identification." This effect was amplified to the maximum extent, as there is nothing that bolsters in-group identity to such a degree as an external contrasting image." It should be noted that in-group identification is now a research interest for scholars in various fields (Cacault & Grieder, 2019; Cho, 2018; Gómez et al., 2019; Hohman et al., 2017; Smeekes & Verkuyten, 2013).

The 'Ndrangheta is a criminal subculture operating mostly in southern Italy, particularly in Calabria. 'Ndrangheta exhibits distinctive characteristics:

1. **Secrecy and Closure:** The 'Ndrangheta functions with a high level of secrecy. Members strictly adhere to rules of silence, avoiding cooperation with law enforcement.
2. **Hierarchy:** The organization adopts a hierarchical pyramid structure with centralized control. Key decisions are made by top-ranking members, emphasizing the importance of loyalty and discipline.
3. **Confrontation with Government:** The 'Ndrangheta frequently clashes with government and law enforcement agencies, resulting in prolonged and violent conflicts.
4. **Legalization:** Some 'Ndrangheta members infiltrate various public spheres, including politics, business, and finance, allowing them to exert influence on different aspects of society.
5. **Criminal Activities:** The 'Ndrangheta is involved in diverse criminal enterprises, encompassing drug trafficking, smuggling, racketeering, extortion, and other forms of organized crime.

6. Cultural and Traditional Aspects: Rooted in Calabrian history, the organization maintains specific cultural and traditional traits, incorporating unique symbols and rituals.
7. Law Enforcement Priority: The fight against the 'Ndrangheta remains a top priority for Italian law enforcement and international organized crime services.

A parallel development transpired within the context of the southern Ukrainian tradition, which, at a specific historical juncture, found itself no longer existing autonomously but within occupied territory.

The initial conflict involving the southern region of contemporary Ukraine can be traced back to the era of Peter the Great, who led military forces into this region. However, this encounter did not culminate in substantive change: "The Zaporizhian Order, despite shifts within Ukraine, retained its original composition and mode of governance." Subsequently, on July 18, 1717, Emperor Peter the Great, harboring resentment towards those who had betrayed him in the years 1709–1710, instructed the Malorossian authorities to employ armed intervention to prevent the Zaporizhians from settle again themselves in Sich and, more broadly, within territories that were under treaties belonging to the Russian state. Hence, their Kosh, established along the course of the Kamenka River as it flowed into the Dnieper, suffered considerable devastation. Furthermore, stipulations outlined in the treaty of April 5, 1712, inked in Tsargrad, stipulated that Russia relinquished all claims to the Zaporozhian Sich. The august Monarch was resolute in upholding this accord, as conveyed by A. Skalkovsky in his publication "History of the New Sich or the Last Kosh of Zaporozhye" (Odessa, 1841).

Nonetheless, the clash with Catherine II ultimately marked the demise of the Ukrainian Cossacks, for this time, they confronted the formidable might of the regular army, which vastly outnumbered their own detachments. In the same work, A. Skalkovsky expounds upon this matter, stating, "Empress Catherine recognized that the Zaporizhian Lower Army, despite its valor and dedication to military endeavors, in its current

composition, could not function as a reliable bulwark and support for the southern frontiers of the Empire."

Confronted with the might of Catherine II's regular army, "lihva" comes to the realization that resistance would be futile. Consequently, it departs for the Danube and later makes its way back to Odessa. "Hence, it does become clear that the folk of Zaporozhye hath stirred the ire of the Creator, for anon there befell a dire calamity so profound that even the vigilant Falcon's intercession proved for naught in forestalling its onset. A great force of the Moscow army, under the leadership of an individual also recognized as a harakternik, though hailing from Germanic territories, reached Zaporozhye. The German harakternik vanquished Sokol with his captivating abilities, resulting in the expulsion of the Zaporozhians across the Black Sea to Turkey" (Korniienko, 1919).

It merits noting that following the Cossacks' departure to the Danube, a concerted effort was made to repatriate the Zaporizhians from the Zadunai Sich, redistributing them among the ranks of the Black Sea Cossacks. Those Cossacks who chose to register and serve the Empress relocated to Odessa, where their service continued.

Should we direct our attention to the book "History of the New Sich or the Last Kosh of Zaporozhye", written by A. Skalkovsky (1846) and published in Odessa, it is prudent to extract the subsequent lines: "The Russian governance, assented to the Zaporizhians' reclamation unto its realm, laboring under the belief that thereby the flight beyond the Danube shall find a gradual cessation. Consequently, facilitated by local Bulgarians, the Cossacks were instilled with the prospect of being welcomed hospitably. The initial vestiges of such a resurgence are discernible in the year 1805, orchestrated under the patronage of the Duke de Richelieu. During this juncture, a handful of Cossacks belonging to the Baturinsky kuren (within the za-Dunai Sich) made their way to Odessa, both by land and sea. Interestingly, they carried with them authorized credentials from the Kosh, imprinted with the seal of the Turkish procurator at the army".

Nonetheless, it is imperative to acknowledge that not all Cossacks who journeyed back from across the Danube to Odessa harbored an inclination to enlist in Catherine II's service and thus become registered. Instead, a portion of these repatriated Cossacks opted to settle within the realm of South Palmyra. They settled on the peripheries of the city, specifically on Moldavanka, Peresyp, and Slobodka. These places bore witness to the inception, proliferation, and consolidation of Odessa's criminal milieu, where it took root, thrived, and gained ascendancy.

Consequently, the Ukrainian *lihva* emerged as the cornerstone of criminal activity within Odessa. The criminal landscape of South Palmyra finds itself portrayed in vibrant detail, not solely confined to the annals of criminal chronicles from that era, but also finding its depiction within an array of literary compositions. Fiction and historical literature serve as invaluable tools for scholars and researchers to comprehend the intricacies of different historical eras, providing nuanced insights into societal development, cultural shifts, and the human experience over time (Butler, 2017; Grajzl & Murrell, 2019; Pace-Sigge, 2018; Sera-Shriar, 2015).

To illustrate, A. I. Kuprin's "Obida" ("Offense") (published subsequent to his sojourn in Odessa) offers a vivid portrayal of a delegation from the combined Rostov-Kharkov and Odessa-Nikolaev thieves' organizations (Kuprin, 1912). This delegation convened to address the commission investigating the Jewish pogroms in Odessa, vehemently disputing the linkage of thieves to the pogroms (1906). The delegation's leader expounded on the intrinsic calling of thievery: "Certain individuals possess a unique faculty of visual memory, keenness and precision of sight, cold-bloodedness, nimbleness of fingers, and an exquisitely delicate tactile sense. They seem to have been specially bestowed upon by divine providence to excel as adept hustlers. The craft of pickpocketing demands unparalleled agility, unswerving precision of motion, not to mention resourcefulness, acumen, and an unwavering focus. Several individuals possess a distinct affinity for delving into the realm of tampering with cash registers. From the earliest days of their youth, they have felt an inexplicable draw towards unraveling the intricacies of multifaceted

mechanisms: be it bicycles, sewing machines, wind-up toys, or even timepieces. Finally, gentlemen of the law, there exists a subset of individuals harboring an innate animosity towards possessions. You may label this phenomenon as degeneration or employ any term of your choosing. But I will say that a true thief, a thief by vocation, cannot be lured into the everyday life of honest prosperity by any carrots: neither a well-secure service, nor money, nor a woman's love. For herein lies the enduring allure of risk, the captivating abyss of peril, the fluttering of the heart, the exhilarating zest of life, the sheer delight! You are armed with the protection of the law, locks, revolvers, telephones, police, troops, -we are armed only with dexterity, cunning, and courage. We are foxes, and society is a henhouse guarded by dogs. Are you aware that in rural villages, it is often the most artistic and gifted individuals who engage in horse-stealing and poacher-hunting? What can one do? Life thus far has been so lacking, so monotonous, so unbearably dreary for impassioned souls!"

DISCUSSION

In his literary work "Story of a Life. Time of Great Expectations," Konstantin Georgievich Paustovsky (1892–1989), a Russian Soviet writer, scriptwriter, educator, journalist, and war correspondent) delineates his experiences in Odessa during the year 1920, a period when the Soviet regime had freshly established its presence in the city. During this phase of instability, with the "white" forces having departed and the "red" forces not yet fully established, Odessa became a hotbed of criminal activity. Petty criminals engaged in stealing firewood for profit, heading out with a shotgun. Avaricious vendors inflated prices, and more audacious individuals resorted to street robberies with finesse, employing an unmistakable Odessa flair. "Shpana" (street urchins) was adorned with weaponry from head to toe, and the general populace also carried revolvers for self-defense. Knavery thrived in Odessa, where one needed to possess the skill to "sell the sleeves from the vest" even at the market (Paustovsky, 1967).

As per K. G. Paustovsky's assessment, approximately two thousand criminals, marauders,

thieves, informants, counterfeiters, smugglers, receivers of stolen goods, and other illicit individuals resided in the outskirts of Odessa during that era (Paustovsky, 1967).

In Odessa, the term “maravicheras” referred to the hooligans who bargained aggressively at the market, engaged in bazaar thefts, and perpetrated robberies. When negotiations failed to lower prices, merchandise was surreptitiously set ablaze or discreetly slashed with razors. Defective goods were sold at underrate. The new market was a realm of stark brutality: card cheats endured savage beatings to the point of bloody countenance; bundles of newspapers were fastened to roaming lunatics and set ablaze, while thieves were subjected to beatings akin to animals... As per the author’s account, the market represented a haven of human degradation and malevolence.

The figures of the southern Ukrainian tradition find vibrant representation in an extensive array of literary compositions. For instance, the narrative “Green Van” authored by A. V. Kozachinsky (1957), whose life is no less interesting than the events of the story itself. Notably, the novels “The Twelve Chairs” and “The Little Golden Calf” penned by I. Ilf and E. Petrov (1928/2011, 1931/2014) equally embrace this tradition. Likewise, K. G. Paustovsky’s “Time of Great Expectations” encapsulates its essence. Remarkably, the protagonists of these literary creations — Cherven, Krasavchik, and Ostap Bender — each encapsulate distinct facets of the southern Ukrainian tradition. Compellingly, these literary personas originate from Odessa itself (Paustovsky, 1967)..

Within the literary realm, A. I. Kuprin and I. E. Babel living in Odessa have eloquently depicted this city and its most luminary characters. Take, for example, the figure of Mishka Yaponchik (Benzion Krik), an emblematic persona renowned for his martial prowess, financial acumen, exceptional organizational skills, and leadership abilities. Furthermore, he is an enigmatic figure, shrouded in legend, mystery, and mystique (Babel, 1995). Cherven, the character of “The Green Van,” is a figure enveloped in legends throughout Odessa. He possesses the remarkable ability to “shoot without withdrawing his hands from his

pockets.” As a lawyer, Cherven adeptly confounds the Odessa law enforcement, deftly evading their grasp while leaving no witnesses behind. Indeed, Cherven embodies an authentic *harakternik*.

Shifting our focus to the portrayal of Ostap Bender, we encounter a quintessential representation of a *chumak* — an individual embodying the dual roles of a businessman and a warrior. It is a certain stage of preparation of the southern Ukrainian tradition, namely, the stage of making money. Ostap Bender had “400 relatively legal ways to make the population part with their money” (for an in-depth exploration of the *chumak* phenomenon in Ukraine, encompassing its psychological and criminological dimensions, readers are directed to the article “Chumak” in *Literary and Scientific Newsletter of Hrushevsky*) (Tarasenko, 2020).

Ostap Bender is a literary character featured in the novel “The Little Golden Calf” and other works by Soviet writers Ilya Ilf and Yevgeny Petrov (Il’f and Petrov, 1931/2014). Penned in 1931, the novel is part of the renowned “The Twelve Chairs” and “The Little Golden Calf” diology (Ilf and Petrov, 1928/2011). Ostap Bender is portrayed as an adventurous and masterfully cunning schemer. The protagonist embarks on a journey across the Soviet Union in pursuit of lost diamonds concealed within a chair. Utilizing his charming and dexterous persona, Bender engages in deceptive antics, navigating through various comedic situations. Ostap Bender has emerged as an iconic character in Soviet literature and cinema, embodying an anti-heroic figure — an adventurous and charismatic trickster who cheerfully and ironically challenges the Soviet reality of the 1920s and 1930s.

Even after the novel’s completion, “Ostap Bender” sustained popularity. In subsequent works by Ilf and Petrov, as well as in adaptations and screenings, the character continued to evolve with new features and adventures. He symbolizes freedom from social norms and resilience in challenging periods. Ostap Bender’s image epitomizes playful subversion and mockery of the system and bureaucracy, earning him popularity beyond the literary work. Integrated into Soviet culture and heritage, he boasts a dedicated fan base, and his

quotes have become part of common civic vocabulary. The charismatic figure of Ostap Bender underscores the significance of humor, even in the most trying times. Beyond his literary legacy, Bender has inspired several films and television series, with different actors embodying his character, further enriching the portrayal of the savvy adventurer who, despite his dishonesty, garners sympathy from readers and viewers alike.

CONCLUSIONS

As a result of this study, a comparative methodology has been developed to explore unknown phenomena in cases where mathematical analysis is impractical. This methodology is particularly applicable to the philosophical and religious analysis of the religious foundations of Cossack-harakternik education when conventional research methods, such as gathering representatives or conducting surveys, are not feasible. Many existing research methods are inadequate for this task, prompting the development of a methodology that ensures accurate data with multiple verification criteria. The foundation of this methodology is a heuristic model, providing four echelons of data verification.

1. Harakternik is an integral part of the southern Ukrainian tradition, renowned for phenomena such as Cossacks, Chumaks, and Haydamaks.
2. The southern Ukrainian tradition (Ukrainian lihva) is criminologically identical to the globally recognized Italian criminal organization, 'Ndrangheta, representing a similar professional basis for organizing banditry.
3. The highest level of training in 'Ndrangheta, known as Santos, corresponds to the level of Harakternik in the southern Ukrainian tradition.
4. Two conflicts involving southern Ukraine mark crucial points in the existence of Ukrainian Cossacks.
5. The return of Zaporozhians from the Danubian Sich and their distribution to the Black Sea Cossacks.
6. Ukrainian lihva serves as the foundation for crime in Odessa.
7. The southern Ukrainian tradition, akin to the northern tradition, possesses its own school, a

system of training, and a mechanism for transmitting knowledge and skills across generations.

8. The manifestation of Ukrainian lihva on the territory of modern Ukraine takes an aggressive and active form after the revolution of 1917.

In conclusion, it is worth emphasizing that every tradition, whether southern or northern, inherently possesses its own distinct "school" and system for transmitting knowledge and skills across generations. The southern Ukrainian tradition also boasts such a structured framework. For instance, the Ukrainian author Ivan Kondratyevich Mykytenko (1897–1937), who resided in Odessa from 1922 to 1926, provides a criminological analysis of this distinctive tradition. His narrative "Vurkagany" (1928) offers insight into the lives of juvenile delinquents in Odessa, delving into their hierarchical structure, specialized roles, methods of acquiring expertise in thievery, and modes of criminal activity. These young individuals were commonly referred to as raklyuga, raklenya, thief, bandit, and vurkagan (Transcaucasian Association of Proletarian Writers, 1929). Even before the upheaval of the 1917 revolution, "old men" still inhabited locales such as Odessa, Kherson, Nikolaev, Zaporozhye, and Dnieper, ensuring the continuous perpetuation of this instructional "school", the center of this educational network remained rooted in Odessa. Subsequent to the events of 1917, a phase of anti-banditry initiatives unfolded in Odessa, coinciding with the most active and assertive manifestation of the "Ukrainian lihva" across modern-day Ukraine. This period encompassed figures ranging from Batka Makhno and beyond.

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REFERENCES

- Babel, I. (1995). *Odesskie rasskazy* [Odessa Stories]. Family Leisure Club.
- Badolati, A. (2017). *Le 'ndranghetiste dell'Est. Profili internazionali della mafia calabrese* [The 'Ndrangheta of the East. International profiles of the Calabrian mafia]. Luigi Pellegrini.
- Butler, P. (2017). Up the Dnepr: Discarding Icons and Debunking Ukrainian Cossack Myths in Gogol's 'Strashnaia mest'. *Russian Literature*, 93–94, 199–249. <https://doi.org/10.1016/j.ruslit.2017.11.006>
- Cacault, M. P., & Grieder, M. (2019). How group identification distorts beliefs. *Journal of Economic Behavior and Organization*, 164, 63–76. <https://doi.org/10.1016/j.jebo.2019.05.027>
- Calderoni, F., Catanese, S., De Meo, P., Ficara, A., & Fiumara, G. (2020). Robust link prediction in criminal networks: A case study of the Sicilian Mafia. *Expert Systems With Applications*, 161, 113666. <https://doi.org/10.1016/j.eswa.2020.113666>
- Catino, M. (2015). Mafia rules. The role of criminal codes in mafia organizations. *Scandinavian Journal of Management*, 31(4), 536–548. <https://doi.org/10.1016/j.scaman.2015.10.001>
- Cho, W. J. (2018). Fairness in group identification. *Mathematical Social Sciences*. <https://doi.org/10.1016/j.mathsocs-ci.2018.04.002>
- Davydchuk, M., Mehlhausen, T., & Priesmeyer-Tkocz, W. (2018). The price of success, the benefit of setbacks: Alternative futures of EU-Ukraine relations. *Futures*. <https://doi.org/10.1016/j.futures.2017.06.004>
- Gómez, Á., Vázquez, A., López-Rodríguez, L., Talaifar, S., Martínez, M., Buhrmester, M. D., & Swann, W. B. (2019). Why people abandon groups: Degrading relational vs collective ties uniquely impacts identity fusion and identification. *Journal of Experimental Social Psychology*, 85, 103853. <https://doi.org/10.1016/j.jesp.2019.103853>
- Craparo, G., David, V., Costanzo, G., & Gori, A. (2018). Cosa Nostra and the Camorra: Assessment of personality, alexithymic traits, and attachment styles. *International Journal of Law and Psychiatry*, 58, 17–26. <https://doi.org/10.1016/j.ijlp.2018.02.010>
- Grajzl, P., & Murrell, P. (2019). Toward understanding 17th century English culture: A structural topic model of Francis Bacon's ideas. *Journal of Comparative Economics*, 47(1), 111–135. <https://doi.org/10.1016/j.jce.2018.10.004>
- Gratteri, N., & Nicaso, A. (2010). *Fratelli di sangue* [Blood brothers]. Mondadori.
- Hohman, Z. P., Gaffney, A. M., & Hogg, M. A. (2017). Who am I if I am not like my group? Self-uncertainty and feeling peripheral in a group. *Journal of Experimental Social Psychology*, 72, 125–132. <https://doi.org/10.1016/j.jesp.2017.05.002>
- Ilf, I., & Petrov, E. (2011). *The twelve chairs: A Novel* (A. O. Fisher, Trans.). Northwestern University Press. (Original work published 1928)
- Il'f, I., & Petrov, Y. (2014). *The little Golden calf: Zolotoy Telenok*. Jiahu Books. (Original work published 1931)
- Kappeler, A. (2014). Ukraine and Russia: Legacies of the Imperial past and Competing Memories. *Journal of Eurasian Studies*, 5(2), 107–115. <https://doi.org/10.1016/j.euras.2014.05.005>
- Korniienko, V. (1919). *Zaporizkiy klad* [Zaporizhzhia treasure]. Ukrainskoe izdatelstvo v Ekaterinoslave.
- Korostelina, K. V. (2013). Ukraine twenty years after independence: Concept models of the society. *Communist and Post-communist Studies*, 46(1), 53–64. <https://doi.org/10.1016/j.postcomstud.2012.12.008>
- Kozachinsky, A. (1957). *Zelenyj furgon* [The Green Van]. Detgiz.
- Kuprin, A. (1912). *Sbornik trudov* [Complete Works] (Vol. 5). Tovarishestvo izdatelskogo i pechatnogo dela A. F. Marks.
- Lavorgna, A., & Sergi, A. (2014). Types of organised crime in Italy. The multifaceted spectrum of Italian criminal associations and their different attitudes in the financial crisis and in the use of Internet technologies. *International Journal of Law Crime and Justice*, 42(1), 16–32.

- <https://doi.org/10.1016/j.ijlcj.2013.11.002>
- Maltsev, O. V. (2017). *Obmanchivaya tishina* [Deceptive silence]. Serednyak T. K. <https://books.google.com.ua/books?vid=ISBN6177599958>
- Maltsev, O., & Lunov, V. (2020). *Filosofiya Yuga Italii* [The Philosophy of Southern Italy]. Serednyak T. K. <https://books.google.com.ua/books?vid=ISBN6177822509>
- Nese, A., O'Higgins, N., Sbriglia, P., & Scudiero, M. (2018). Cooperation, punishment and organized crime: a lab-in-the-field experiment in southern Italy. *European Economic Review*, 107, 86–98. <https://doi.org/10.1016/j.euroecorev.2018.05.004>
- Nicaso, A., Gratteri, N., & Trumper, J. B. (2014). *Male Lingue: Vecchi e nuovi codici delle mafia* [Evil Languages: Old and New Codes of the Mobs]. Luigi Pellegrini Editore.
- Pace-Sigge, M. (2018). How homo economicus is reflected in fiction — A corpus linguistic analysis of 19th and 20th century capitalist societies. *Language Sciences*, 70, 103–117. <https://doi.org/10.1016/j.langsci.2018.07.005>
- Paustovsky, K. (1967). *Sbornik trudov v vosmi tomah* [Collected Works in Eight Volumes] (Vol. 5). Khudozhestvennaya Literatura.
- Sera-Shriar, E. (2015). Arctic observers: Richard King, monogenism and the historicisation of Inuit through travel narratives. *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences*, 51, 23–31. <https://doi.org/10.1016/j.shpsc.2015.01.016>
- Skalkovsky, A. (1846). *Istoriya Novoj Sechi ili poslednego Kosha Zaporozhskogo* [History of the new Sich or the last Kosh Zaporizhian]. Gorodskaya tipografiya Odessy.
- Smeeke, A., & Verkuyten, M. (2013). Collective self-continuity, group identification and in-group defense. *Journal of Experimental Social Psychology*, 49(6), 984–994. <https://doi.org/10.1016/j.jesp.2013.06.004>
- Tarasenko, E. (2020, June 6). Chumaki. *Literary and scientific newsletter of Hrushevsky*. <https://www.lnvistnik.com.ua/ru/chumaki>

Transcaucasian Association of Proletarian Writers. (1929). Na granice Vostoka [On the Boundary of the East]. *Literary and Artistic Monthly Journal*, 7–8.

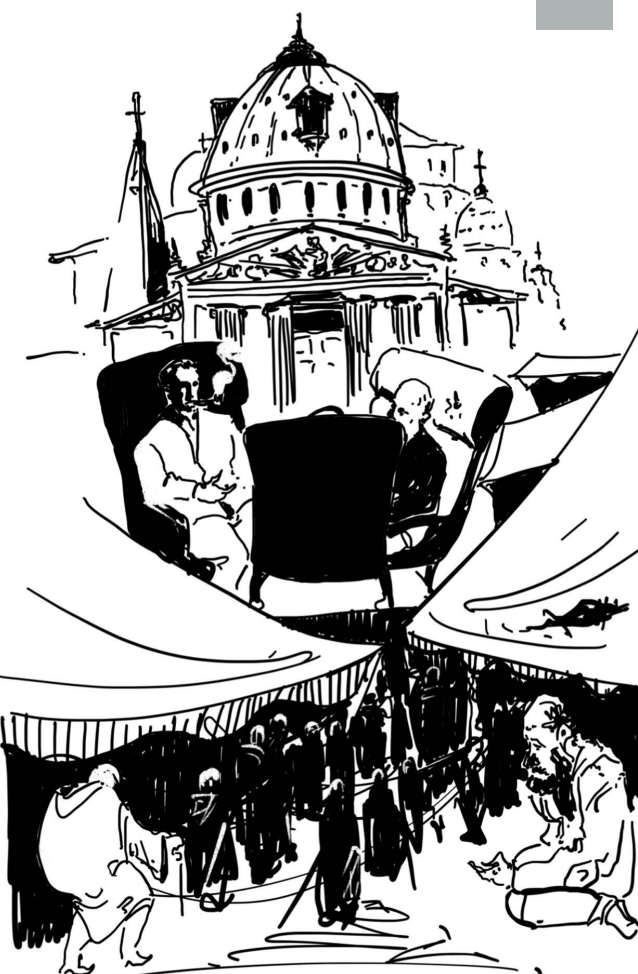
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'NDRANGHETA HAS NO CRISIS

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ABSTRACT

The ongoing emergency situation associated with the spread of the coronavirus is already evident in its potential to cause serious consequences for society, the economy, and the population's psyche. Conversely, the most profound changes often emerge due to unforeseen circumstances that compel people to radically redefine their lifestyles. In such cases, we could potentially derive benefits from a serious situation to formulate future plans and adaptive work strategies. However, given recent events including the uncontrolled spread of the epidemic, the artificial escalation of panic, widespread quarantine measures, and other repercussions, one might expect chaos, crisis, and panic to prevail in many European countries. Italy, especially, should be susceptible to such issues as it held a prominent position in the COVID-19 incidence rankings for a considerable period.

Nevertheless, there exist regions and individuals that remain impervious to crisis; their adaptability to any conditions is a skill honed over a prolonged duration. This article delves into the factors contributing to the relatively lower panic and epidemic spread in the southern Italian region of Calabria,



specifically examining the role of the criminal subculture known as ‘Ndrangheta. The study analyzes its business and organizational model, which has demonstrated its effectiveness to date and exhibited adaptability to modern lifestyles and changes.

Keywords

COVID-19, pandemic, ‘Ndrangheta, Mafia, Camorra, criminal tradition

INTRODUCTION

In early 2020, the world faced an unprecedented crisis with the onset of the COVID-19 pandemic, disrupting daily life, causing economic turmoil, and instigating widespread social changes across various facets of human activity. Italy, significantly impacted by the pandemic, underwent profound transformations in its social fabric and economy. Southern Italy, specifically Calabria, stood out for experiencing a surprisingly limited impact compared to the rest of the country. A notable contributing factor to this resilience was the presence and activities of the ‘Ndrangheta, a formidable and secretive criminal organization with historical roots in Calabria. With a substantial influence on the region’s economic and social dynamics, the ‘Ndrangheta’s role during the COVID-19 pandemic raises intriguing questions about how and why this criminal entity not only withstood the crisis but potentially augmented its influence.

The author endeavors to unravel the intricate socio-economic interplay between the pandemic and

the ‘Ndrangheta’s operations in Calabria. The focus extends beyond the organization’s current impact amid the pandemic to encompass its historical evolution, structure, and *modus operandi*. Through a comprehensive analysis of diverse sources, including statistical reports, historical archives, and insights from experts and local residents, the article aims to shed light on the ‘Ndrangheta’s distinctive position in the social and economic landscape of Calabria during the pandemic.

The objective of this paper is to examine the repercussions of the COVID-19 pandemic on the operations and structure of the ‘Ndrangheta, exploring how this criminal organization has navigated and adapted to emerging challenges and altered circumstances. By delving into the historical, social, and economic dimensions of the ‘Ndrangheta, our goal is to discern not only how the organization managed to endure the global crisis but also to explore the possibility of its increased influence in Calabria. This research relies on a comprehensive analysis of accessible statistical data, historical records, and contemporary reports detailing the activities of the ‘Ndrangheta. Additionally, it incorporates interviews with experts in criminology, economics, and social sciences to enrich the depth and breadth of the study.

METHODOLOGY

The methodology employed in this article adopts an integrated approach to scrutinize the endeavors of the ‘Ndrangheta amid the COVID-19 pandemic. This investigation incorporates both quantita-

tive and qualitative methods, ensuring a thorough comprehension of the influence exerted by this criminal organization on the society and economy of Calabria.

Diverse data sources are employed, encompassing official statistical reports on criminal activity, economic status, and social conditions in Calabria. Historical documents and studies detailing the evolution of the 'Ndrangheta and its role in Italian society are considered. The analysis also incorporates contemporary studies and reports on the activities of the 'Ndrangheta, including its response to the COVID-19 pandemic.

Analytical methodologies employed include content analysis, which scrutinizes publicly accessible materials like news articles, law enforcement reports, and scientific publications pertaining to the 'Ndrangheta. Comparative analysis is utilized to assess the situation in Calabria in relation to other regions of Italy and countries affected by the pandemic. Additionally, expert interviews are conducted with specialists in criminology, economics, and social sciences to glean additional perspectives and achieve a deeper understanding of the situation. The research is carried out following ethical and standardized protocols. All utilized data are anonymized, and information acquired from experts is employed with their consent and in adherence to confidentiality principles.

RESULTS

Amidst the COVID-19 pandemic, the 'Ndrangheta has demonstrated noteworthy adaptability and resilience, prompting inquiries into the nature of its influence. This article delves into multiple facets of the 'Ndrangheta's conduct, seeking to comprehend the reasons behind its remarkable effectiveness in navigating crises. The analysis of contemporary research narratives emphasizes the relevance and importance of coping with unforeseen events and effectively responding to crises (Aven & Krohn, 2014; Coombs & Laufer, 2018; Hajikazemi et al., 2016; Kuzmanovic & Gaffney, 2017; Ramezani & Camarinha-Matos, 2019). The history of the 'Ndrangheta illustrates its remarkable capacity to adjust to evolving circumstances. Transforming

from a basic criminal entity, the group has evolved into a potent international organization adept at overseeing substantial financial transactions and intricate operations. Emphasize that experts from various fields pay special attention to analyzing how different organizations cope with challenges (Anderson-Fletcher et al., 2017; Lamboglia et al., 2018; Markman & Venzin, 2014; Paraskevas & Quek, 2019).

The 'Ndrangheta not only survived in the pandemic but potentially fortified its position in the region. This is linked to its capability to influence the economy and society, particularly in times of economic instability and social unrest. The 'Ndrangheta's transition from conventional criminal approaches to the utilization of digital technologies, such as online marketplaces and cybercrime, has been noted. This illustrates the adaptability of the organization and its proficiency in seizing new opportunities to broaden its influence.

The 'Ndrangheta's impact on public opinion and even regional politics has been documented. Its capability to manipulate information and leverage public sentiment for its benefit constitutes a significant facet of its influence. The research underscores the necessity for additional exploration of the 'Ndrangheta as a social and economic phenomenon. Gaining insights into the mechanisms of its resilience and adaptability can provide valuable lessons in combating organized crime and comprehending the impact of criminal structures on society at large.

In order to comprehensively address the posed inquiries, it is essential to delve into the origins of culture and history, analyzing the conditions that shaped the way of life and philosophy of southern Italy. This includes examining the emergence and persistence of criminal traditions within this region. The southern part of Italy serves as a mirror reflecting the broader human history, providing a cross-section of the world's chronology. Within this small patch of land lies everything necessary to study global trends, categories, and phenomena of worldwide significance. The article titled "Criminal Tradition as a Vehicle of Historical Transmission" extensively explores the crucial importance of studying criminal traditions in historical research. These criminal subcultures have remained remarkably

consistent throughout centuries, needing to remain effective and resilient in their ever-evolving world. They also serve as a conveyance for history and key skill, as they can stand as a primary source of information (Filippova, 2020).

Another crucial aspect pertains to the training of individuals within these criminal traditions, encompassing the transmission of knowledge across generations, the methods employed for member training, and the factors contributing to their effectiveness. The issues of education and skills acquisition are very relevant today, which is reflected in current research publications in various fields (Ward et al., 2018; see also Hikosaka et al., 2013; Karlson & Birkelund, 2019; Van Laar et al., 2017; Wilson, 2013). The training approach within many criminal organizations is characterized by rapidity, as skills need to be acquired swiftly due to the unpredictable nature of their activities. There is a lack of time and favorable conditions for extensive, years-long training. Moreover, the overall level of training among members of these organizations tends to be relatively low. This simplicity and accessibility in training methods cater to the needs of every member. Despite these factors, criminal structures exhibit a remarkable level of resilience and survival, even in the face of engaging in illegal activities. Their ability to endure is noteworthy, given the constant threat of incarceration. This situation places them at a distinct disadvantage compared to law-abiding individuals. Yet, these criminal entities consistently achieve results and continue to operate effectively. It means that underscores their efficacy, surpassing even state institutions within the confines of the country in which they operate.

As widely recognized, Italy has witnessed the emergence of three prominent criminal organizations: 'Ndrangheta, Camorra, and the Mafia. It is worth noting that these organizations are of particular scientific interest for interdisciplinary research (Buonanno & Pazzona, 2014; Calderoni et al., 2017; Craparo et al., 2018; Lavorgna & Sergi, 2014; Sergi, 2019). Among these, Camorra stands out as a criminal entity that, according to the prevailing hypothesis, originated directly in Campania during the XVI–XVII centuries. Renowned Florentine writer Marc-Charles-François Monier encapsulated the essence of Camorra, stating, “The term Camorra

encompasses much more than a mere association. It signifies a range of power abuses and influences” (Monnier, 1862).

The Sicilian Mafia gained global notoriety, extending its operations to economically robust cities in the United States. Meanwhile, the 'Ndrangheta, a Calabrian criminal subculture, has risen to prominence due to its exceptional efficiency, making it one of the wealthiest and most influential criminal syndicates worldwide. Their prowess lies in their ability to traffic significant volumes of cocaine, manipulate substantial economic assets in global financial markets, while simultaneously preserving age-old rituals, customs, hierarchies, and relationships rooted in the original subculture. Notably, the forces of global crime have been unable to erode these foundations.

Presently, 'Ndrangheta stands as the sole criminal organization that upholds rituals, myths, and symbols that were once shared among Camorristi and other incarcerated individuals in the early nineteenth century, specifically in the confines of Favignana prison near Trapani, as well as Nisida and Procida near Naples. Remarkably, 'Ndrangheta continues to employ symbolic paraphernalia borrowed from the reformed Carboneria, symbolic of the Bourbon opposition, to induct new “Picciotti” members and cultivate a distinct sense of identity and belonging (Gratteri & Nicaso, 2019). It should be noted that all these criminal organizations have adopted economic methods and have, in many cases, established close ties with politicians and infiltrated legal economic systems.

Grown in silence, 'Ndrangheta has emerged as the most formidable, influential, and extensively pervasive criminal syndicate worldwide. Within Italy's confines, no other entity presently matches its accelerated profit growth. Exceeding a staggering 44 billion euros in turnover, excluding money laundered proceeds, 'Ndrangheta stands as a formidable, aggressive, and infiltrative enterprise, adept at permeating both the economy and public institutions. It uniquely attains a global footprint, spanning across virtually all corners of Italy, Europe, Africa, Asia, the Americas, and Oceania (Gratteri & Nicaso, 2010).

Of particular note are the criteria of social acceptability, where membership in a criminal organization is considered immoral to the average European, yet for Sicilians and Calabrians, it signifies affiliation with a potent force. It translates into societal authority, respect, and a prosperous future. Decades ago, a clear distinction was drawn: there is “Vita” — the good life for those within the organization, and for the rest, “mala vita” — a life of hardship (Mirabella, 1910).

When visiting Palermo, Calabria, and Puglia, the distinct disparities among the people and societies become readily apparent. Notably, Palermo and its surrounding areas are marked by a stringent discipline that underscores their orderliness, whereas Naples and the central region of Puglia are characterized by a pervasive sense of chaos.

Within the framework of Academician Oleg Maltsev’s proposed tactical strategy for combating

epidemics, an initial aspect defining an epidemic as an emergency is its inherent tendency to escalate (Maltsev, 2020). However, a prevalent characteristic of the southern Italian regions is a form of conditional isolation from the broader Italian mainland. Sicily, being an island, naturally fosters geographical separation, while Calabria, situated at the southernmost tip, is not a hub of extensive transportation interchange. Its mountainous terrain further impedes access to various regions and towns, many of which are perched atop hills. This historical context of “closure” and isolation acts as a deterrent to the rapid propagation of viruses, owing to the challenges and limited accessibility to residential areas. Supporting this perspective, the following facts and published statistics stand out: Calabria boasts the lowest coronavirus mortality rate among regions and is associated with underreported incidence rates relative to other areas (“L’effetto Coronavirus in Calabria: “Tasso Di Letalità Tra I Più Bassi D’Italia”,” 2020).

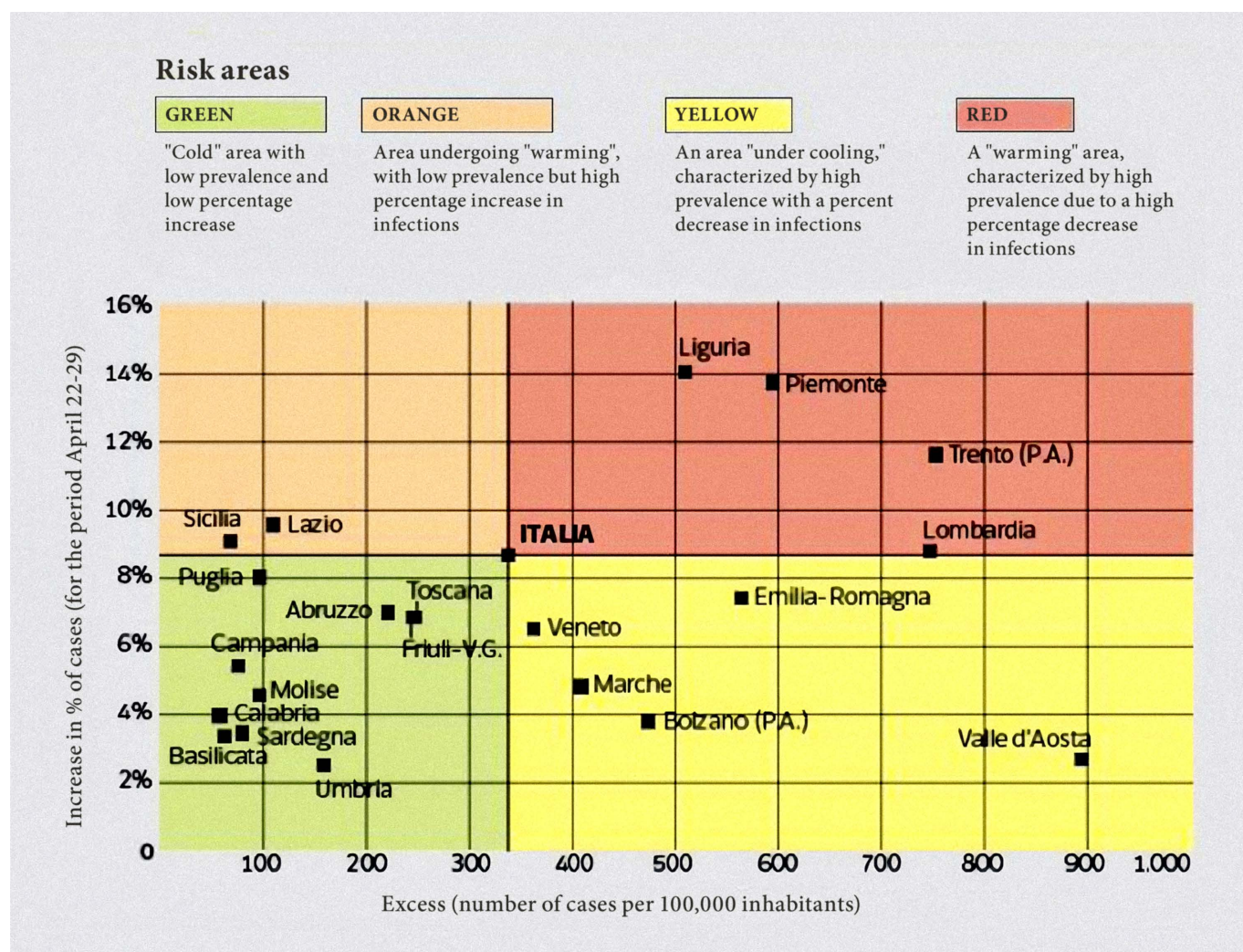


Figure 1. Morbidity statistics on the territory of Italy (April 22-29)

The official statistics for the entire Italy, including the southern region, indicate that the southern part of the country is not in a high-risk zone for the spread of the virus. This is evident from a graph published in the May 4, 2020 edition of “Corriere della Sera” (Fig. 1), which categorizes all the major cities in southern Italy within the “cold” risk zone, denoting a low percentage of virus transmission (Basso, 2020). Only Sicily is marked with a minimal score within the orange zone, which is described as an area with low scores but the possibility of emerging risks. An analysis of the overall trend in the increase of coronavirus cases in the southern region reveals that a significant portion of cases emerged due to induced migration after the initial phase of quarantine and the implementation of the Presidential Decree urging people to “stay at home” (*Decreto Del Presidente Del Consiglio Dei Ministri 4 Marzo 2020*, 2020). By March 24 alone, around 40,000 individuals had returned to Sicily since the beginning of the coronavirus epidemic, which undoubtedly contributed to a considerable spread of the virus within the region (Ganci, 2020). It is worth noting that even after this period, access to the island was not completely restricted, and movements continued with relatively lenient controls at ferry crossings, including during the Easter holidays (“Caos Sullo Stretto, De Luca Rilancia La Banca Dati E Chiede L'intervento Di Musumeci,” 2020). With the transition to the second phase of quarantine on May 4, Sicily remained closed until May 17, allowing access only for essential personnel such as police and armed forces members, healthcare workers, and those involved in essential services (*Decreto Del Presidente Del Consiglio Dei Ministri 4 Marzo 2020*). The governor of Sicily has stated his intention to keep access to the island restricted until the end of May, with the final decision depending on the prevailing epidemiological situation.

The geographical separation and relative isolation of southern Italy have indeed played a significant role in shaping its unique culture and traditions. This isolation has allowed certain aspects of its heritage to be preserved in a more “moth-balled” form, shielding it from some external influences and pan-European trends. This makes the region particularly rich for cultural and traditional research. However, the ‘Ndrangheta, while rooted

in its archaic identity, is not a static entity. It is a dynamic organization that continually evolves and adapts to modern needs and ideals. Its methods of operation, expansion, and asserting power are constantly changing to become more effective and sustainable. Therefore, it is crucial to stay informed about new trends, economic changes, and conduct ongoing research to understand this ever-changing structure accurately.

The ‘Ndrangheta is considered a criminal subculture that has evolved over centuries, adjusting to changing circumstances. The quarantine measures imposed on the Italian territory and the alteration of daily life due to external factors are just part of the ongoing transformation and adaptation of its activities.

DISCUSSION

In recent works by renowned researchers Nicola Gratteri and Antonio Nicaso, it is noted that the ‘Ndrangheta is shifting towards being less violent and embracing the world of digital technology and money laundering. New leaders of traditional criminal organizations are increasingly aware of new markets, business opportunities, and how information technology can be harnessed to enhance profits and expand operations. A paper by the National Security Research Division of the Rand Corporation in 2014 highlighted that the online black market has evolved from networks of individuals driven by notoriety to a highly organized and centralized structure linked to traditional criminal groups like drug cartels, mafia, and terrorist cells. This underscores the adaptability and sophistication of these criminal organizations, indicating their capacity to embrace modern technology and remain relevant in a changing world (Gratteri & Nicaso, 2019).

The adaptability of criminal organizations, such as drug dealers, to changing circumstances and technologies is evident in their response to the COVID-19 pandemic and the economic challenges it has brought. With the closure of borders and lockdown measures in place, drug dealers have shifted their tactics to home deliveries and leveraging social networks for contacts and distribution. Criminal groups, including the mafia, are capitalizing on

their resources and mobility to exploit opportunities and generate profits even in turbulent times. Small and medium-sized enterprises are facing significant financial losses due to the pandemic and are bracing themselves for a post-viral economic crisis. Many businesses are at risk of bankruptcy and other dire consequences as they navigate the challenges ahead.

The online realm has also become a platform for criminal activities. An example is the Mega-online scam originating in Calabria, which involved unauthorized access to computer systems, distribution of access codes, computer fraud, and money laundering (this was reported on March 26, 2020). A group of 117 individuals were implicated in the case, all of whom were involved in the operation. The accusations encompass unauthorized entry into a computer system, unlawful ownership and dissemination of computer system access codes, computer-based deceit, and the act of money laundering ("Truffe Online E Phishing, 117 Indagati a Reggio Calabria," 2020).

Alessandro Anselmi, a researcher who delved into the realm of onion routing, sheds light on the role of "Crypto-markets." Anselmi explains that these platforms serve as venues for trading drugs, firearms, and digital products. These online marketplaces operate in a manner akin to established e-commerce platforms like eBay or Amazon (Anselmi, 2019).

Anselmi emphasizes that a key distinction lies in the anonymity afforded by these platforms, even facilitated by cryptocurrencies like Monero and Zcash. The most sought-after commodities on these sites include drugs, counterfeit documents, counterfeit banknotes, credit cards, weapons, and various forms of malware — ranging from simple data-stealing software to sophisticated, professional-grade programs capable of intercepting, altering, or pilfering sensitive user information. Notably, this extensive network is also routinely exploited for the illicit laundering of funds through covert and anonymous online transactions. Despite this, the security of these systems continues to improve over time, contingent upon their intricacy, exchange mechanisms, and the utilization of multiple concealed pathways for fund recycling.

The shift towards electronic realms has undoubtedly impacted crime trends in Italy, as well as in numerous other countries globally. Recent data reveals a noticeable decrease in criminal activity, reaching approximately 75% in Italy for the month of March compared to the same period in the previous year. This trend also extends to New York City, which experienced a 25% reduction in crime, and Los Angeles, where a 5.6% decrease was observed (bearing in mind that the situation demanding citizens to stay at home had not yet emerged in that part of the world). A similar pattern is evident in Toronto. Nevertheless, given the economic standstill resulting from the quarantine measures in Italy and beyond, this criminal structure possesses a remarkable capacity to swiftly and effectively adapt across various sectors such as the economy, industry, and logistics (Grignetti, 2020).

The frequency of extortion demands seems to have diminished, and even abroad, the strategy in this regard has undergone some adjustments. Rather than requesting a "pizzo" (a monthly cash payment), many restaurant owners, for instance, have acquiesced to utilizing products sourced from companies affiliated with criminal organizations, which may involve operating under the direction of mafia proxies.

This characteristic of rapid adaptation and transformation is not a recent phenomenon alone, but has historical precedents. History illustrates that organized criminal entities have historically capitalized on natural calamities. A notable instance is the catastrophic earthquake that struck Reggio Calabria and its province in 1908, ranking among the most devastating seismic events of the 20th century. This earthquake, measuring 7.1 MW in magnitude, occurred at 5:20:27 local time on December 28, 1908, causing extensive destruction to the cities of Messina and Reggio Calabria in just 37 seconds. Approximately half of Sicily's population and a third of Calabria's population perished. It stands as one of the most severe natural disasters in terms of casualties in Europe's memory and the largest such catastrophe on Italian soil during recorded history. Yet, for the 'Ndrangheta, this catastrophe presented a remarkable opportunity for financial gain. In the aftermath of the earthquakes in Emilia-Romagna, Abruzzo, and Umbria, several

entrepreneurs connected with the 'Ndrangheta endeavored to secure funds for post-disaster reconstruction (*Che istituisce attestati di benemerenzia in occasione del terremoto Del 28 dicembre 1908, 1909*).

As per the analysis of crime researcher and author Antonio Nicaso, the 'Ndrangheta's evolving nature suggests that while they have displayed an inclination towards adaptability over the years, their opportunistic and predatory character renders their actions unpredictable. This dynamic situation calls for vigilance, as the potential outcomes of their actions remain uncertain. It is important to emphasize that while there may be instances where capital is employed for usurious activities, directly impacting struggling entrepreneurs facing liquidity challenges, this scenario should be averted. Specific government interventions ought to be implemented to aid those already grappling with the crisis (Maltsev, 2020).

However, a substantial risk persists whereby certain enterprises could fall into the clutches of usurers. Moreover, there is a looming threat of criminal organizations taking control of businesses, particularly those that are most susceptible to the global economic downturn. It is crucial to acknowledge the likelihood that some business leaders may attempt to bridge financial gaps through purported "charitable contributions." Nonetheless, these seemingly philanthropic gestures by the mafia are far from altruistic; they mask a cunning strategy aimed at facilitating hostile takeovers, imposition of dominance, and fostering dependency (Esteves, 2020).

In the midst of economic turmoil and uncertainty surrounding the post-epidemic landscape, certain organizations have managed to mitigate the adverse effects. Notably, Calabria and Sicily have remained relatively unscathed by the crisis. Their legal food businesses, both domestically and abroad, have been able to sustain their operations by adapting to evolving consumer demands.

An important consideration, highlighted by scientist Oleg Maltsev in his developed epidemic control tactics, is the potential psychological repercussions of prolonged stay-at-home measures. Imposing a series of stringent regulations can lead

individuals to form conclusions such as the belief that authorities have unchecked power, that legal protections are non-existent, or that their fundamental human rights are being violated. This can even extend to skepticism about the validity of the nation's supreme law, the Constitution. It is worth noting, however, that criminal organizations operate under their own set of laws, norms, and regulations which they strictly adhere to. These internal codes are integral to their sustenance and well-being. They often disregard national laws, which is a central factor contributing to the emergence of criminal traditions within a state.

From a psychological standpoint, it is important to highlight that members of the 'Ndrangheta do not exhibit significant psychological disorders and tend to lead relatively stable lives. As noted by Antonio Nicaso in an interview with the Vatican newspaper, criminal organizations are adept at seizing opportunities amidst crises, often transforming challenges into advantages.

CONCLUSIONS

This article has thoroughly examined the key factors contributing to the resilience of southern Italy and entities like the 'Ndrangheta in the face of the changes brought about by the coronavirus pandemic. These factors encompass both morbidity statistics and economic stability, as well as the flexibility inherent in their business system. Specifically, the following factors have been explored:

- Geographical Isolation of the region.
- The historical isolation of the region, along with its unique culture, traditions, and way of life.
- Archaic Identity.
- The existence of their own laws, canons, and traditions, distinct from those of the general state.
- Effective and Flexible Business Model.
- Transition to the Digital Space which, among other things, leads to a reduction of crime in Italy and worldwide.

It is crucial to direct attention towards the philosophy of southern Italy. History reveals it as a philosophy deeply rooted in complete efficiency,

spanning generations and effectively addressing a diverse array of challenges over centuries, both in historical contexts and contemporary business. Despite 'Ndrangheta's remarkable resilience and adaptability in facing artificially imposed adverse conditions during the coronavirus pandemic, this should not be misconstrued as an encouragement to join its ranks or partake in its activities. Rather, one should heed the Archbishop of Reggio di Calabria's plea during the pandemic, "Never succumb to 'Ndrangheta", and view this structure through the lens of an efficient business model and management approach ("Coronavirus, L'appello Dell'arcivescovo Ai Reggini: 'Mai Cedere Alla 'ndrangheta,'" 2020). This entails focusing not on wrongdoing, but on efficiency, tactics, logical reasoning, thought patterns, adaptation to the modern world, and more. The knowledge and philosophy that underlie this structure can be judiciously and rationally applied to life, mirroring 'Ndrangheta's adeptness at adapting to events and changes to its advantage, ensuring its uninterrupted existence for decades.

If an individual does not transition from an ineffective philosophy to an efficient one, fails to eliminate obstacles, neglects the cultivation of conditions for their own future, and disregards the elements that shape their outlook, then it is likely that challenges in their life will not merely remain stagnant, but may even escalate.

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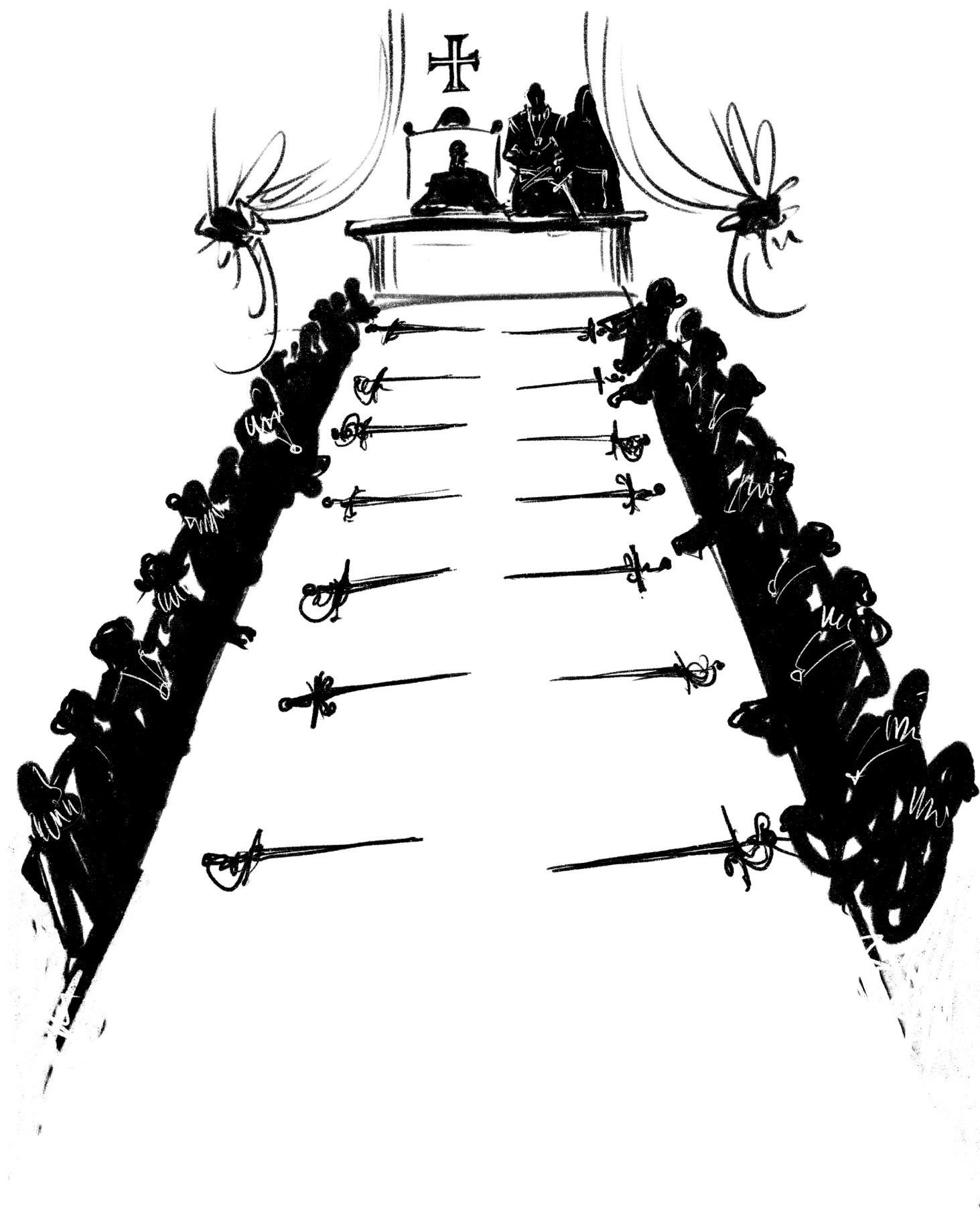
REFERENCES

- Anderson-Fletcher, E., Vera, D., & Abbott, J. (2017). How mindful is your company? Lessons for organizations from the Texas Health Presbyterian Hospital Ebola crisis. *Organizational Dynamics*, 46(4), 202–211. <https://doi.org/10.1016/j.orgdyn.2017.06.001>
- Anselmi, A. (2019). *Onion routine, cripto-valute e crimine organizzato*: in "Quaderni del Centro Ricerca Sicurezza e Terrorismo" [Onion routines, cryptocurrencies and organized crime: in "Journals of the Security and Terrorism Research Center"]. Pacini.
- Aven, T., & Krohn, B. S. (2014). A new perspective on how to understand, assess and manage risk and the unforeseen. *Reliability Engineering & System Safety*, 121, 1–10. <https://doi.org/10.1016/j.ress.2013.07.005>
- Basso, F. (2020, May 4). Dalle fabbriche ai cantieri Ripartono in 4,4 milioni. *Corriere Della Sera*. <https://www.confartigianato.it/wp-content/uploads/2017/05/202005040734110657.pdf>
- Buonanno, P., & Pazzona, M. (2014). Migrating mafias. *Regional Science and Urban Economics*, 44, 75–81. <https://doi.org/10.1016/j.regsciurbeco.2013.11.005>
- Calderoni, F., Brunetto, D., & Piccardi, C. (2017). Communities in criminal networks: A case study. *Social Networks*, 48, 116–125. <https://doi.org/10.1016/j.socnet.2016.08.003>
- Caos sullo Stretto, De Luca rilancia la banca dati e chiede l'intervento di Musumeci. (2020, April 2). *Gazzetta Del Sud*. <https://messina.gazzettadelsud.it/articoli/cronaca/2020/04/02/caos-sullo-stretto-de-luca-rilancia-la-banca-dati-e-chiede-lintervento-di-musumeci-7967e62f-473d-4963-b7ce-2c7637c4d08d/>
- Coombs, W. T., & Laufer, D. (2018). Global Crisis Management — current research and future directions. *Journal of International Management*, 24(3), 199–203. <https://doi.org/10.1016/j.intman.2017.12.003>
- Coronavirus, l'appello dell'arcivescovo ai reggini: "Mai cedere alla 'ndrangheta." (2020, April

- 1). *Gazzetta Del Sud*. <https://reggio.gazzettadelsud.it/articoli/cronaca/2020/04/01/coronavirus-lappello-dellarcivescovo-ai-reggini-mai-cedere-alla-ndrangheta-lcd8640c-db20-445e-9db2-244a90ald843/>
- Craparo, G., David, V., Costanzo, G., & Gori, A. (2018). Cosa Nostra and the Camorra: Assessment of personality, alexithymic traits, and attachment styles. *International Journal of Law and Psychiatry*, 58, 17–26. <https://doi.org/10.1016/j.ijlp.2018.02.010>
- Decreto del Presidente del Consiglio dei Ministri 4 marzo 2020*. (2020, March 4). *Gazzetta Ufficiale Della Repubblica Italiana*. <https://www.governo.it/sites/new.governo.it/files/DPCM4MARZO2020.pdf>
- Esteves, J. A. (2020, April 28). Mafia must be prevented from taking advantage of pandemic, expert says. *Crux*. https://cruxnow.com/church-in-europe/2020/04/mafia-must-be-prevented-from-taking-advantage-of-pandemic-expert-says?fbclid=IwAR3QTRJX-W1LYgCrid6ZcgR%20DBg9N7jUGpNiUa1f3DB3257MdXoqfK-luF_c
- Filippova, A. (2020, February 17). Criminal tradition as a vehicle of history. *Odesa Historic-literature Scientific Society*. <https://odhislit.com/analitika/kriminalnaya-tradicziya-kak-transportnoe-sredstvo-istorii/>
- Ganci, V. (2020, March 24). In Sicilia sono rientrati dal Nord in 40mila ma non tutti si sono autodenunciati. *Il Giornale*. <https://www.ilgiornale.it/news/cronache/coronavirus-virus-sicilia-arrivato-lesercito-dei-rientrati-1845452.html>
- Gratteri, N., & Nicaso, A. (2010). *Fratelli di sangue* [Blood brothers]. Mondadori.
- Gratteri, N., & Nicaso, A. (2019). *La rete degli invisibili* [The network of the invisible]. Mondadori.
- Grignetti, F. (2020, March 28). Tutti a casa per il coronavirus, crollano i reati del 64% ma non le violenze domestiche o le rapine alle farmacie. *La Stampa*. <https://www.lastampa.it/cronaca/2020/03/27/news/tutti-a-casa-crollano-i-reati-del-64-ma-non-le-violenze-domestiche-o-quelli-contro-le-farmacie-1.38644142>
- Hajikazemi, S., Ekambaram, A., Andersen, B., & Zidane, Y. J. (2016). The Black Swan — Knowing the unknown in projects. *Procedia — Social and Behavioral Sciences*, 226, 184–192. <https://doi.org/10.1016/j.sbspro.2016.06.178>
- Hikosaka, O., Yamamoto, S., Yasuda, M., & Kim, H. F. (2013). Why skill matters. *Trends in Cognitive Sciences*, 17(9), 434–441. <https://doi.org/10.1016/j.tics.2013.07.001>
- Karlson, K. B., & Birkelund, J. F. (2019). Education as a mediator of the association between origins and destinations: The role of early skills. *Research in Social Stratification and Mobility*, 64, 100436. <https://doi.org/10.1016/j.rssm.2019.100436>
- Kuzmanovic, M., & Gaffney, N. (2017). Enacting futures in postnormal times. *Futures*, 86, 107–117. <https://doi.org/10.1016/j.futures.2016.05.007>
- Lamboglia, R., Fiorentino, R., Mancini, D., & Garzella, S. (2018). From a garbage crisis to sustainability strategies: The case study of Naples' waste collection firm. *Journal of Cleaner Production*, 186, 726–735. <https://doi.org/10.1016/j.jclepro.2018.03.151>
- La 'ndrangheta ai tempi del Coronavirus, demA: “Emergenza ha favorito le cosche e il narcotraffico.” (2020, March 25). *Il Dispaccio*. <https://ildispaccio.it/archivio/calabria/240217-la-ndrangheta-ai-tempi-del-coronavirus-dema-emergenza-ha-favorito-le-cosche-e-il-narcotraffico>
- Lavorgna, A., & Sergi, A. (2014). Types of organised crime in Italy. The multifaceted spectrum of Italian criminal associations and their different attitudes in the financial crisis and in the use of Internet technologies. *International Journal of Law Crime and Justice*, 42(1), 16–32. <https://doi.org/10.1016/j.ijlcj.2013.11.002>
- L'effetto coronavirus in Calabria: “Tasso di letalità tra i più bassi d'Italia”. (2020, April 1). *Gazzetta Del Sud Calabria*. <https://calabria.gazzettadelsud.it/articoli/cronaca/2020/04/01/leffetto-coronavirus-in-calabria-tasso-di-letalita-tra-i-piu-bassi-ditalia-e003e067-c153-4a33-b4be-9108d40c4407/>

- Maltsev, O. V. (2020, April 7). Tactics of work in an epidemic. *Literary and Scientific Newsletter of Hrushevsky*. <https://Invistnik.com.ua/ru/taktyka-raboti-v-uslovyah-epyde-myy/>
- Markman, G. M., & Venzin, M. (2014). Resilience: Lessons from banks that have braved the economic crisis — And from those that have not. *International Business Review*, 23(6), 1096–1107. <https://doi.org/10.1016/j.ibusrev.2014.06.013>
- Mirabella, E. (1910). *Mala vita: gergo camorra e costumi degli affiliati con 4500 voci della lingua furbesca in ordine alfabetico* [Mala vita: camorra slang and customs of the affiliates with 4500 entries of the cunning language in alphabetical order]. Francesco Perrella.
- Monnier, M. (1862). *La camorra notizie storiche raccolte e documentate per cura di Marco Monnier* [The camorra historical news collected and documented by Marco Monnier]. G. Barbèra.
- Che istituisce attestati di benemerenza in occasione del terremoto Del 28 dicembre 1908*. (1909, June 25). *Gazzetta Ufficiale Del Regno D'Italia*. https://www.gazzettaufficiale.it/atto/serie_generale/caricaArticolo?art.progressivo=25&art.idArticolo=1&art.versione=1&art.codiceRedazionale=010G0236&art.dataPubblicazioneGazzetta=2010-12-15&art.idGruppo=0&art.idSottoArticolo1=10&art.idSottoArticolo=1&art.flagTipoArticolo=1
- Paraskevas, A., & Quek, M. (2019). When Castro seized the Hilton: Risk and crisis management lessons from the past. *Tourism Management*, 70, 419–429. <https://doi.org/10.1016/j.tourman.2018.09.007>
- Ramezani, J., & Camarinha-Matos, L. M. (2019). A collaborative approach to resilient and antifragile business ecosystems. *Procedia Computer Science*, 162, 604–613. <https://doi.org/10.1016/j.procs.2019.12.029>
- Sergi, A. (2019). Constructing the mafia concept on the bench. The legal battles in the 'Mafia Capitale' case in Rome. *International Journal of Law Crime and Justice*, 58, 100–112. <https://doi.org/10.1016/j.ijlcj.2019.04.002>
- Truffe online e phishing, 117 indagati a Reggio Calabria. (2020, March 26). *Gazzetta Del Sud*. <https://reggio.gazzettadelsud.it/articoli/cronaca/2020/03/26/truffe-online-e-phishing-117-indagati-a-reggio-calabria-68fff91e-2030-4a9e-8beb-4f2eacdad37e/>
- Van Laar, E., Van Deursen, A. J. a. M., Van Dijk, J., & De Haan, J. (2017). The relation between 21st-century skills and digital skills: A systematic literature review. *Computers in Human Behavior*, 72, 577–588. <https://doi.org/10.1016/j.chb.2017.03.010>
- Ward, P., Gore, J., Hutton, R. J. B., Conway, G., & Hoffman, R. R. (2018). Adaptive skill as the Conditio sine qua non of expertise. *Journal of Applied Research in Memory and Cognition*, 7(1), 35–50. <https://doi.org/10.1016/j.jarmac.2018.01.009>
- Wilson, R. (2013). Skills anticipation — The future of work and education. *International Journal of Educational Research*, 61, 101–110. <https://doi.org/10.1016/j.ijer.2013.03.013>

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SOCIOLOGICAL SURVEILLANCE OF THE PANDEMIC

EXPLORING INTERCONNECTEDNESS, PANIC, AND WAVES OF CRISIS

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ABSTRACT

The significance of examining the COVID-19 pandemic from a sociological perspective extends beyond medical issues. It primarily encompasses the social dimension, focusing on the way individuals interact, and the pandemic's influence on social, political, economic, and cultural realms. This includes the transformation of social institutions and structures, as well as the dynamics of social processes in both management and self-organization.

The main subject of the article is the problem of studying the impact of a pandemic on modern society with its informational, cognitive-innovative, and hyper-realistic certainty. The author explores the phenomenon of the pandemic, its impact as a global threat and danger on micro, meso, and macro-social structures and organizations, on the main institutions of society, and on international institutions. The pandemic becomes a process of

social “freezing” in the broad sense, meaning any relationships among people, but also entails social, political, economic, and cultural constraints; both public and international constraints of states and international institutions.

Keywords

social constraint, panic, crisis, media influence, simulation, hyperreality.

INTRODUCTION

The pandemic produces panic as a social phenomenon in various dimensions of masses (socio-behavioral), socio-organizational and institutional, and on a global scale through prompt replication, repetition, modification, rumor, gossip, and information warfare. The theory of social fractality serves as a study of the processes of mimesis, replication, and scaling in masses, socially organizational and global



dynamics. The author differentiates various phases of the impact of the pandemic on international processes as certain phases and waves of interaction between countries in the struggle and solidarity. All these define new trends for governments and the world community.

Contemporary innumerable narratives have turned their attention to the pandemic (Kramer et al., 2020; Lippert, 2020; Prachand et al., 2020; Shaw et al., 2020; Warrillow et al., 2020). The relevance of the COVID-19 pandemic study is shaped not solely by medical concerns (such as patient zero cases, vaccine development, disease transmission speed, etc.), but equally by social issues related to human interaction, the pandemic's influence on social, political, economic, and cultural domains, the transformation of social institutions and structures, and the dynamics of social processes in both management and self-organization (Campbell, 2020; Chia & Oyeniran, 2020; Health, 2020; Schwartz, 2020; Yang et al., 2020).

The article emphasizes the ongoing importance of understanding the pandemic, including its connections, public panic, and successive waves of crisis. It positions itself as a study of the social dimension, exploring the future implications at macro, meso, and micro levels. Beyond immediate concerns, it addresses the global community, international relations, societal integrity, and resilience as fundamental institutions within the state. Additionally, it considers other aspects of institutional integrity and analyzes reference groups and interactions at the individual level.

METHODOLOGY

The author advocates for employing a range of sociological methods and approaches. The primary focus of the article lies in examining the pandemic's impact on modern society, encompassing its informational, cognitive-innovative, and hyperrealistic aspects. The article explores the phenomenon of the pandemic as a global threat, affecting micro, meso, and macro-social structures, organizations, and major societal and international institutions. The pandemic is characterized as a process of social "freezing" in the broad sense, referring to the halt in various human interactions. Moreover, it influences social, political, economic (Goodell, 2020), and cultural interconnections, both at a domestic and international level, encompassing states and international institutions.

The issue of the pandemic's social impact as a global and widespread threat, influencing human interactions in the information and digitized world, represents a novel phenomenon in the socio-cultural realm. The rapid dissemination and amplification of fear and panic are intensified not only by real processes but also by simulations and phantasms, which can have an equal, if not greater, effect on the overall situation.

The emergence of new meanings and challenges related to the dissemination of fear, panic, and changes in social interconnectedness due to the pandemic presents a unique aspect of this research. The novelty lies in the utilization of diverse levels of theoretical comprehension in sociology

and socio-philosophical analysis to ascertain the trends of the pandemic's social impact. This includes exploring microsociology, which examines interpersonal relationships and individual interactions, mesosociology, which delves into social behavior and activities within groups, communities, institutions, and organizations, and macrosociology, which investigates the global dimension of the process.

The focus of our investigation was the influence of the pandemic on social bonds and connections. We aimed to explore the effects of the phenomenon of pandemic as a global threat and danger on micro, meso, and macro social structures and organizations, as well as on the main institutions of society and international establishments. Our scientific inquiry sought to examine the trends and implications arising from the pandemic's impact as a worldwide menace on various social dimensions and organizational levels.

RESULTS

Our modest scientific inquiry seeks to delineate the dynamics, stages, and phases in the formation of crisis waves, examining the mechanisms of replication and scaling from the medical (pandemic) crisis to the transformation of crisis phenomena in other realms of life and in international and global relations. The objective is to comprehend the mechanisms of crisis dynamics resembling a "tsunami," "storm," and "whirlpools," with the aim of constructing a scheme for modeling real processes of social interaction. This involves exploring temporality, strategies, and tactics of effective actions in the face of global peril across various levels of social actors making decisions.

The outcomes of conceptualizing dynamics as a model of essential relations in a pandemic focus on the macro dimension of connectedness, ascertained through the examination of challenges, prospective problems, and trends. On one hand, these dynamics alter social relations by posing a threat to individual health and the well-being of localized social communities, often with territorial or ethnic ties. On the other hand, they serve as a testing ground for the resilience and vulnerability of social institutions.

Hence, the ensuing discourse delves into the domains of political economy, economics, and the sociology of the economy, along with the field of health. These spheres are scrutinized through the lens of the functional significance of institutions, assessing their role in shaping the resilience or vulnerability of societal structures amid the impact of a "pandemic." The turbulent processes that emerge are explored by the author through heuristic images of turbulence, specifically characterized as "tsunamis," "storms," and "whirlpools."

DISCUSSION

1. Challenges, promising problems and trends of the future

Let us consider challenges and potential problems that shape future trends, sparking the question: "What lies ahead?" Our world has entered an entirely novel reality of social and international relations, where ruptures have forcefully brought forth discussions about the possible collapse of the European Union and the strategies to preserve it. The current scenario witnesses a widespread limitation of external connections, and this is particularly significant as Germany's economy, for instance, heavily relies on exports (accounting for 50% of its economic activity). The core connection between France and Germany is experiencing strain, signaling the need to address critical issues. In the face of crisis, the prevailing sentiment seems to be "every man for himself!"

In the realm of hyper-reality, the actual virus itself seems less intimidating compared to the exaggerated actions of the government and politicians, amplified through internet and media "hype" surrounding "tough" but sometimes inappropriate measures. The widespread dissemination of fear, backed by the "silent majority," has led to a detachment of politicians from the reality on the ground, manifesting first as false helplessness and later as false omnipotence. This situation sets the stage for political tensions and potential political crises in the near future.

Our generation still recalls the book and multi-part movie titled "The Open Book" by Ve-

niamin Kaverin (Titov, 1980), featuring the talented actress Iya Savvina. The story revolved around scientists studying the fight against viruses, and how they pitted science against intrigue and politics. Dealing with an epidemic involves containing outbreaks, the efforts of specialized medical teams, and preventive measures. The pertinent questions arise, such as which doctors and specialists are involved in decisions to restrict movements, how outbreaks are localized, the establishment of response headquarters and medical teams, the availability of medicines and their procurement from the Ukrainian pharmaceutical industry, and negotiations for vaccines, possibly with China, for instance. However, instead of addressing these crucial aspects, the Ukrainian economy comes to a halt, following the actions of the European Union. Meanwhile, airlines reap significant profits from transporting Ukrainians from abroad and from the planned flights that are canceled.

The pandemic has revealed significant weaknesses and unpreparedness in public administration, particularly in organizing the “front line” and safeguarding society from global threats. This encompasses the domains of science, education, and practical medicine.

Firstly, the scarcity of national level 3 and 4 laboratories worldwide capable of researching and developing vaccines and tests against pandemic viruses became evident. Moreover, these laboratories, situated in pandemic-prone areas, often face accusations and conspiracy theories, linking them to the development of bacteriological and viral weapons (and the probability of this is quite high). Consequently, questions arise concerning the control, restriction, and potential banning of such weapons altogether.

Secondly, the unpreparedness of practical medicine in the face of the coronavirus threat was evident in various aspects. Doctors lacked technical support, and there was a lack of preparedness for setting up temporary field hospitals and mobilizing trained medical volunteers. Additionally, a shortage of capable military doctors was observed. The simultaneous implementation of medical reforms alongside reduced funding and increased non-medical responsibilities for doctors led to a

discrimination of their social prestige. Many doctors were unwilling, and some even faced dismissal, due to the reluctance to work in risky conditions. These factors revealed a breakdown in the societal philosophy of the doctor’s high mission.

Even military doctors, traditionally respected, found themselves overshadowed, with the exception of providing medical aid to Italy by Russia, which was interpreted as a display of “soft power” according to Joseph Nye (2009).

Thirdly, the illness of primary care physicians and attending virologists brought to light the need for an effective organization and configuration of medical treatment and care. It became evident that the influx of patients, including the “anxious” seeking to ensure their health, not only overwhelmed medical institutions but also hindered their effective functioning.

Fourthly, the information civilization exposed the lack of preparedness of most medical institutions to effectively communicate and promote necessary measures through the main channels of mass communication. Only popular medical presenters like Dr. E. Komarovskiy and V. Lyashko, Chief Sanitary and Epidemiological Doctor of Ukraine and Deputy Minister of Health, successfully managed this task. Employees of the Ministry, researchers from relevant institutes of the National Academy of Sciences of Ukraine, and the branch National Academy of Medical Sciences of Ukraine did not conduct the necessary work in this regard. The absence of official information gave rise to rumors and the spread of inaccurate information through reference networks. Even the Kyiv City State Administration made decisions based on a “fake” forecast from the NAS of Ukraine, which was subsequently refuted by the academic organization (Tarusova, 2020).

Fifth, the decision-making of state and local authorities has been inadequate. The challenge was to control the flow of people from the pandemic zone without causing severe damage to their own economy, to act within the framework of legislation while addressing the emergency situation, and to localize the medical crisis without letting it escalate and affect the economic, social, and political spheres. These bodies were not prepared to

make balanced decisions regarding the pandemic, including measures for localization and closure. The mechanisms of scaling and replication of the crisis through symbolic and real “freezing” of connectedness in relations will be further described.

Sixth, the lack of state reserves for effective emergency actions and the presence of “state egoism” shifted the burden of responsibility onto citizens or other states. The state also failed to swiftly implement state orders for protective equipment and treatment, and the pharmaceutical industry faced challenges in supporting both scientific research and practical medical solutions.

Seventh, the state relied more on tools of discipline and violence rather than medical strategies to tackle the pandemic. Law enforcement agencies and customs services took center stage in implementing measures to “close” the state and “freeze” social and other interactions.

Eighth, the lack of professional medical statistics and sociology of medicine resulted in uncertainty regarding accurate methods of recording the number of sick, recovered, and deceased individuals. This led to two opposing viewpoints prevailing in the mass consciousness and public opinion: some believed that the authorities were concealing the true scale of the pandemic, while others thought that the authorities were exaggerating the minimal number of cases and deaths (attributing other diseases and deaths to the coronavirus).

The lack of effective measures at the “first echelon” of defense against the pandemic resulted in significant shifts in mass consciousness. People resorted to spontaneous behaviors when faced with a threat to life, such as hoarding food and engaging in panic buying. There was a growing disillusionment with the authorities, leading some individuals to adopt mythological and religious worldviews as a means of coping with uncertainty, often resulting in a state of psychosis. Attention became intensely focused on information describing the “threat,” leading to an overwhelming abundance of fear and panic-driven behavior. In the absence of a viable solution to the challenge and the ability to influence its cause, individuals turned to ersatz objects (as per Konrad Lorenz’s terminology) to sublimate

their fear. This aggression allowed them to release the built-up tension in their interactions “us-them” (Lorenz, 1994).

The lack of effectiveness of the “first echelon” in handling the direct threat of the virus and providing proper diagnostics and treatment with a humane approach has led to a shift towards the second “echelon” of state actions. This involves restricting people’s interactions and using legalized violence to combat the people, rather than focusing on the disease itself, as well as switching people’s behavior in scaling the crisis to other spheres of society.

As a result, inflation and transportation restrictions have directly impacted small and medium businesses, which heavily rely on their daily earnings. This situation necessitates the regulation of these functions and spheres. During the quarantine period, individuals, families, and organizations are struggling to maintain their “financial cushions,” using them to compensate for the soaring prices and loss of income.

The pretext of the epidemic in Europe is already triggering the redistribution of managerial positions and large property, and we can expect more changes in the future. Large property is rapidly losing value, and the reduction of consumer activity is causing a decline in economic links. Under the guise of force majeure circumstances, justifications and breaks in economic chains are occurring, often based on phantom rather than real reasons. This situation extends beyond medicine and becomes a complex issue involving economics, politics, and cultural implications.

The media played a significant role in triggering panic and irrational behavior among the public, lacking rationality, logic, and responsibility. There was a lack of clear, safe, and convenient channels for citizens to access medical institutions. The absence of a well-defined and understandable treatment plan further added to the confusion; it was compensated by an information overload from various sources, including TV shows and non-professional opinions. In contrast, in Wuhan, China, they swiftly built special hospitals, isolated patients, and efficiently managed the epidemic, resulting in the timely clo-

sure of these hospitals. In our situation, the economy stopped. The approach and response to the pandemic varied depending on the location and the number of patients affected. The understanding of the virus's spread, incubation period, and the speed of organizational actions and countermeasures differed between the initial outbreak (first-time situation) and subsequent territories (already having knowledge from other affected areas).

The epidemic has become a significant pretext for disregarding the law in implementing the “second echelon” measures. There is no specific epidemic law adopted, and experts such as medical professionals, virologists, economists, and political scientists are not involved in modeling the situation, continuous monitoring, and proposing appropriate actions. The actions taken by law enforcement agencies to restrict movement and include measures sometimes violate constitutional and legislative frameworks, focusing more on restricting individuals suspected of the disease rather than addressing the medical crisis properly, which involves analyzing arrival territories, contact tracing, local movement, diagnosis, and more.

At this stage, the mythologization of the “us vs. them” consciousness is strengthened through symbolization. For instance, certain attributes serve as symbols of the “other” or the “them”: those arriving from abroad or from a different direction; individuals who are distinct from “us,” specifically, “us” are those who wear masks and follow all imposed norms (regardless of their efficacy); “us” are those who promptly adhere to restrictions and also experience panic like “us.” On the contrary, the “them” group does not place trust in the “symbolic state” as “us” do and does not transfer responsibility for their security to it, etc.

This symbolism of “us” and “them” serves as fertile ground for the authoritarianization of power and the loyalty of citizens to illegitimate actions in the sphere of legalized violence. It creates a new world characterized by “transparency of evil,” as described by J. Baudrillard (Butler, 1999), and combined with neo-feudalism according to Umberto Eco, within limited and closed territories. This is accompanied by populist statements (hype) from politicians, absurdities, and the loy-



Figure 1. Lisbon airport. Photo by Maxim Lepskiy



Figure 2. Lisbon airport. Photo by Maxim Lepskiy

alty of the silent majority. The hope for a world sanctified by meaning may be irretrievably lost. Symbolic representations of this world are seen in virtual glasses shown in Vodophone ads, the shift of main contacts to online platforms, the fashion for protective masks, and selfies of people wearing masks, reflecting both real health concerns and the compliant behavior of citizens.

At the second stage, when facing the second echelon of society's defense, the strength of rationality, culture, and humanism is put to the test, often alongside panic and inadequate actions to resolve the situation. This reveals the fragility of institutions in law, economy, education, and culture. Panic not only demonstrates the vulnerability of social institutions and organizations but also results in a scaling of the crisis from the medical sphere to the economy, law, politics, and culture through group panic solidarity and mass behavior. This leads to the spread of the crisis across various domains, impacting the main institutions of society and international cooperation, creating a dynamic wave. The height of the wave is shaped by the impact on the main institutions of society and international cooperation, and this "height" determines the dynamics of the waves. The wave primarily targets the sociality and economy of resilience.

2. Attacked Sociality

The virus has triggered the emergence of new social practices and the dismantling of old ones. Increased social and physical distance has become a norm for hygienic safety. New object mediators, like plastic curtains and hand sanitizers, are now part of communication between people. Traditional handshakes have been replaced with fist gestures, reducing tactile and close distance practices due to fear and distrust. Even transportation and shopping malls have been affected. The only exception is the inner circle, the family, which led to the significant impact in Italy. The disruption of basic social connections and fear of losing fundamental support has created tension and panic. The consequence of these changes is yet to be seen, and the metaphor of the European family has been shattered due to the destruction of sociality.

The pandemic has accelerated the shift to-

wards online activity and reduced offline interactions, leading to individualization and atomization as widespread practices. In Italy, for instance, attempts to maintain contact and distant solidarity resulted in activities like singing on balconies. Online platforms witness people expressing their fears and panic through comments, reinforcing their paranoia and creating a sense of distance in social relations, viewing others as a threat. These ruptures exacerbate the erosion of social trust and foster an "us versus them" mentality, where some countries are unwilling to forgive the lack of solidarity from others, while prioritizing solidarity and information hype over professional actions. The decline of sociality has prompted a migration of social activities to the hyperreality of social networks, magnifying individual fears and struggles without the collective intelligence and courage of rationality. As a result, misinformation spreads easily through social media, making verification a challenging task requiring scientific and comprehensive perspectives. Despite the fact that misinformation is the subject of extensive scientific discourse, we are still unable to prevent it and prevent its consequences (Lewandowsky et al., 2017; Benedict et al., 2019; Bessi, 2017; Ecker et al., 2017; Gilligan & Gologorsky, 2019).

In the social structure of society, the destructive processes are not evenly distributed, and the epidemic primarily affects people with weakened immunity. Vulnerable groups include the elderly, children, and individuals of all ages with chronic or severe illnesses. Low-income individuals who suffer from poor nutrition and lack of education are also at risk, as well as those living in unsanitary conditions, such as the homeless, beggars, and vagrants. Additionally, the shadow quick-contact businesses that are not effectively controlled by law enforcement systems, such as prostitution and drug addiction, are particularly susceptible to the impact of the epidemic.

The measures to restrict social contacts have a significant impact on freezing "social ties," including the activities of social structures that address social problems, such as social work and volunteer activities. This situation also affects shadow structures within criminal business. Deprived of their usual social supports, vulnerable segments of the population involved in social assistance programs

and criminal activities may feel abandoned, leading to a potential increase in domestic offenses in the context of panic and loss of control by law enforcement agencies. The situation is further exacerbated by the heightened tension between “us” and “them”.

By the way, Fernand Braudel extensively studied the correlation between the quality of nutrition, immunity, and survival during epidemics in history (Braudel, 2006). Among the vulnerable groups are pensioners and elderly individuals without sufficient social support from family or territorial connections (neighbors, community members, etc.). They are not only at risk from a health perspective but also face challenges in maintaining social contacts, such as grocery shopping and communication, especially during periods of restricted movement. Moreover, the social base for anomie and protest sentiments can emerge among the affected business sectors and defense echelons, who may feel abandoned by the state and politicians, and perceive themselves as “them” or marginalized identities in a divided society.

The situation of tension surrounding the reduction of physical and social contact spaces, such as homes and apartments, is intensified. It is well-known that the compression of space often leads to specific social tensions, similar to those observed in closed collectives like army barracks or prisons. For instance, in Italian prisons, the cessation of visits and food transfers has resulted in instances of revolt, resistance to administration, and even escape attempts. This tension can further manifest in cases of family violence or suicidal behavior. In the youth environment, a protest culture may emerge, characterized by violations of gathering prohibitions and a general distrust of restrictive measures, especially among certain youth subcultures that endorse rebellious or antisocial behavior. This behavior is more prevalent in settings with weak education and upbringing institutions, inadequate legal measures, or weak institutionalization of territorial criminal subcultures, such as those influenced by organized crime (such as ‘Ndrangheta, Mafia and Camorra).

Macrosociological processes, which are the focus of macrosociology, reveal the state’s weaknesses in organizing and managing situations arising from the growing confrontation between “us” and

“them.” These weaknesses often lead to politicization, providing a channel for directing tension towards opposition parties or externalizing it as a “threat from abroad,” with confrontations with neighboring countries usually being more intense than those with distant ones, as observed by ethnologist Konrad Lorenz (1994).

These macro-social processes fuel distrust in composite political associations, leading to the exacerbation of separatist sentiments, sometimes with the support of other geopolitical players. The initial high expectations of protection, care, and efficient handling of the danger from leaders of the European Union, particularly Germany and France, can later give way to disappointment, fostering resentment or even hatred. Similar tensions can emerge between the center and periphery of political entities, where ruptures may resonate with the mythologem of “us versus them.” Instances of this phenomenon include the removal of EU flags in Italy and the display of Russian flags after receiving assistance in the form of military medics.

These phenomena become evident as international institutions face exaggerated expectations due to the complex and interconnected nature of international relations. International social cohesion experiences similar or even greater pressure compared to social referential cohesion. This is why pandemics, as seen in the research of F. Braudel, frequently precede or coincide with global wars and revolutions. There is hope that the world will endure, but it is undoubtedly undergoing transformation.

3. Political Economy and a Critical Examination of the Pandemic’s Political Economy. Issue of a Macrosociology

Classical political economy revolves around understanding how property relations, production, and productive forces define politics as a concentrated economy. However, when a pandemic strikes, it significantly impacts both the economy and politics (Schabas, 2015; see also Mitra & Ulubaşoğlu, 2016). Nobel laureate Wasily Leontief (1936), an American of Russian origin, emphasized the importance of intersectoral analysis, with special attention to transport connectivity. Interestingly, the initial

actions to combat the pandemic targeted transport systems, not directly the coronavirus, because it was fighting against people but not viruses. The focus was on restricting people's movements, under the pretext that they could be spreaders or carriers of the virus. Air, railways, and road communications were affected, and filtration systems were established even in areas not recognized as epidemic territories, citing the global nature of the pandemic. It is important to note that the measures were more about controlling people living in certain territories rather than strictly containing the disease in those areas. For instance, in Lombardy, people who didn't reside in the region were allowed to leave without testing, leading to the virus being spread further by individuals moving between regions.

In this context, citizens of Ukraine faced the challenge of returning home as the price of tickets on UIA (International Airlines of Ukraine) surged to maximum levels. Instead of focusing on the local-

ization of the sick and those in contact with them, barriers and limitations were imposed on transport connectivity, affecting not only the economy but also the global economy. The media further fueled panic and the "freezing" of social connectedness. This "freezing" of connectivity was compounded by the freezing of economic ties, including supply chains and offline relations within the "consumer-supplier-producer" model. The impact extended to both reasonable measures like canceling mass events and unreasonable actions such as shutting down the service sector and affecting small and medium-sized businesses, especially those closely tied to systems of connectivity.

Indeed, in dealing with a pandemic, the priority should have been given to medical measures and the creation of specialized medical facilities, similar to what China did with the construction of new hospitals. Professional epidemiologists should have played a dominant role, supported by the assistance



Figure 3. Mask

of police and military for localization purposes. However, in some countries, including Ukraine, the focus shifted to administrative protocols for businesses, leading to partisan and shadow services (“for friends”), as well as various forms of corruption. The inadequacy of the response can be attributed to the neglect of the sanitary-epidemic service and the lack of funding for scientific research on viruses and bacteria in Ukraine. This resulted in a shortage of specialists capable of handling crisis situations, as well as modern laboratories and scientific institutions, making the country more vulnerable to the dangers of a pandemic

The next trend observed was the draining of the financial resources of the majority of the population due to rising prices, the fluctuation of currency exchange rates, which acted as a kind of tax on the pandemic but did not address the underlying problems. On a global scale, the pandemic led to a redistribution of global assets, with global businesses being affected by the disruptions in transportation.

In the political realm, there has been a rise in neo-protectionism, with states taking greater control over exchange, distribution, consumption, and exerting indirect but significant influence on production. The decision-making process at state and municipal levels often lacks foresight (unwise decision-making), merely copying and replicating decisions made by major global players. This has resulted in a simulation of governance and a lack of personal responsibility, fueled by media hype during election times. In the face of the pandemic, some authoritarian regimes, like those in Belarus or China, have demonstrated greater efficacy in handling the situation. This poses a significant threat to democracy and liberalism as it challenges the notions of open and free societies. Fantastic fiction has shown that global fear and panic can lead to a shift towards totalitarianism, radical protectionism, and the preservation of false regimes. The economic and political world is undergoing significant changes as the ‘wave’ impacts major economic and political institutions.

4. Sociological Analysis of Economics and the Economic Particularities of the Coronavirus Pandemic

Economic forecasters in the United States are actively discussing the thesis that the pandemic-induced closure of large global economic masses is being referred to as the “Great Shutdown,” drawing parallels with the “Great Depression.” Howard J. Schatz, a senior economist and specialist in international economics and development, asserts that the pandemic’s impact on the U.S. economy is the fourth most severe economic crisis in the nation’s history, following World War I, World War II, and the Great Depression.

The U.S. is forecasting a 12% decline in GDP for the second quarter, which is compared more frequently with the 2008 crisis, where the decline was 8.4% in the fourth quarter. To address the crisis, the U.S. plans to allocate 10% (tithe) of its economy. This includes 1.8 trillion dollars for direct assistance to individuals, 350 billion dollars for small businesses (covering 33% of employees in firms with up to 100 people), and 500 billion dollars for other businesses primarily through credit guarantees. Congress is considering providing individuals with 1000–1200 dollars, subject to filling out their declarations, and 500 dollars for children. The U.S. economy’s total value is 21.4 trillion dollars (“The Economic Wallop of COVID-19: Q&a With RAND Experts,” 2020).

The coronavirus pandemic and the “freezing” measures implemented to combat it have significant economic and political implications. These measures can be costly and dangerous for various sectors of the economy, and they also threaten certain consumer expectations and dependencies. This situation is especially significant in the context of upcoming US Presidential elections and elections in other countries.

The geo-economic connectivity of the US is notable, with 15% of imports coming from China and 7% of exports going to China. Additionally, 34% of exports go to the EU, and 30% of imports come from the EU. However, there is little discussion about the double-freezing process concerning global players and even less so for border and transit states, such as Ukraine (this situation has

been extensively discussed by Gorbulin (2018) and Mikhalchenko (2004).

The early exit of China, South Korea, and Japan from the economic “freeze” provides advan-

tages in the global market, especially with their expansionist economic behavior. Additionally, the global criminal financial systems, as discussed by criminologists A. Nicasso and O. Maltsev, can benefit from the “freezing markets” (Sokolova, 2019).

Employed population by types of economic activity in 2012-2018							
	(thousand people)						
	2012	2013	2014	2015	2016	2017	2018
Total employed	19261.4	19314.2	18073.3	16443.2	16277	16156	16361
Agriculture, forestry and fishery	3308.5	3389.0	3091.4	2870.6	2866.5	2860.7	2937.6
Industry	3236.7	3170.0	2898.2	2573.9	2494.8	2440.6	2426.0
Construction	836.4	841.1	746.4	642.1	644.5	644.3	665.3
Wholesale and retail trade; repair of motor vehicles and motorcycles	4160.2	4269.5	3965.7	3510.7	3516.2	3525.8	3654.7
Transportation, warehousing, postal and courier activities	1150.9	1163.6	1113.4	998.0	997.2	991.6	995.1
Temporary accommodation and catering	326.7	328.9	309.1	277.3	276.7	276.3	283.0
Information and telecommunications	297.9	299.9	284.8	272.9	275.2	274.1	280.3
Financial and insurance activities	315.8	306.2	286.8	243.6	225.6	215.9	214.0
Real estate operations	322.2	314.3	286.1	268.3	255.5	252.3	259.4
Professional, scientific and technical activities	504.1	493.6	456.0	422.9	428.1	415.8	437.9
Administrative and support services activities	343.9	343.3	334.3	298.6	304.3	297.9	304.3
Public administration and defense; compulsory social insurance	1003.6 ²	962.3	959.5 ²	974.5 ²	973.1	979.7	939.3
Education	1633.2	1611.2	1587.7	1496.5	1441.4	1423.4	1416.5
Health care and social assistance	1181.4	1171.8	1150.5	1040.7	1030.4	1013.6	995.4
Arts, sports, entertainment and recreation	225.6	226.5	221.2	207.9	201.6	199.8	196.9
Other economic activities	414.3	423.0	382.2	344.7	345.8	344.6	355.2

Table 1. Employment Statistics in Ukraine, 2012-2018

The impoverishment and rising unemployment resulting from the pandemic serve as the social base for radical political, criminal, and shadow movements on a global scale, posing a threat to transit states. In summarizing the situation in Ukraine, we must consider the unique economic relations with global players and the country's limitrophic nature.

Firstly, it is important to note that solidarity and imitation of actions taken by global players (USA, EU, China) without considering the specifics of their economic scale and state structure may not be suitable. "Democratic" countries focus on self-correcting market mechanisms, while authoritarian nations emphasize maximum citizen control and state regulation of the economy. In Ukraine, we are proposing authoritarian measures to combat the pandemic, but the economic resources needed for democratic market measures are lacking, and the hope for external assistance is uncertain.

Secondly, "Freezing" as a response to the health crisis should be approached with caution, considering the potential consequences in other spheres. The Italian experience has shown that extending this approach to the financial and economic sectors could trigger a chain reaction affecting social and political realms. However, the situation in Ukraine is somewhat different. The state, acting as an instrument of corruption and exerting pressure on small and medium businesses, relies heavily on the police for imposing administrative fines and restrictions. Various sectors, including services, transport, civil service, education, small and large businesses, and production spheres, are now under threat. Refer to Table 1 "Employment Statistics in Ukraine, 2012–2018" (State Statistics Service of Ukraine, 2018).

Thirdly, the healthcare system needs a significant financial boost to enhance the speed of patient identification and treatment without resorting to totalitarian methods and violence. It is evident that medical science, virology, and biochemistry have not only suffered from insufficient funding but have also lost their research capabilities. The absence of licensed virus research laboratories and the lack of applied research in this field have made Ukraine dependent on geomedicine (medicine from global

players) for vaccines and tests during pandemics and solidarity to it.

Fourthly, the media has flooded the discussion with numerous opinions, fears, and phantoms during the pandemic, leading to a hyperreality in the economy. In Ukrainian TV, there were even statements from so-called "experts" claiming that sick individuals are both victims and killers as they infect others (shifting the focus from the epidemic to a fight against people). These circumstances are shaping new economic relations for the future world.

In macroeconomic relations and international politics, there is an increasing burden on international institutions and global actors as their decisions are replicated throughout the global periphery. In the absence of effective solutions, the credibility and legitimacy of these global actors decline, leading to a fractal pattern of panic and inefficiency, amplifying the "wave of crisis." This growing "wave of crisis," in terms of both height and extent of influence, generates fear and renders decision-making at the global level incapable, replicating helplessness across all relations in the globalized world. The "freeze" and attacks on sociality in all spheres create both the fragility of social systems and the social base for aggressive processes in the context of "us vs. them" dynamics.

CONCLUSIONS

The first conclusion is that the pandemic, whether real or virtual, imposes specific requirements and creates significant tension in the two main echelons responsible for protecting society. The **first stage** pertains to the professional sphere to which the danger belongs, in the case of a pandemic, it is the medical sector. As the threat is of a global scale, the demand is for the scaling up of society's protective capabilities. At this moment, the state, as the primary organizing institution (with civil society as the alternative, offering network scaling possibilities), must bolster the first echelon materially, organizationally, and procedurally to be fully prepared to proactively address this issue.

The focus is on mobilizing science, diagnostics, and preparing the organizational and process

aspects of diagnostics, disease identification, and treatment. If the state delegates its functions to global players in the globalized world and negligently leaves the decisions solely to the medical sector without supporting it with the capabilities of other societal spheres (e.g., economic, political), then scaling occurs through the mobilization of panic (when organizational actions are lacking, the problem is amplified by the media, and fear is replicated through civil society and network information structures). The level of panic scaling determines the level of the crisis wave. The second trend of scaling involves the transformation of the primary crisis (in our case, the medical crisis) into other spheres of society.

The emergence of the crisis wave's apex during the first stage shapes the spatial impact of the wave during the second stage. The “wave of crisis” simultaneously engulfs the space of defeat and triggers the activation of the second echelon of societal defense. Instead of addressing the virus directly, the state resorts to measures of disciplinary and legalized violence against people who are sick or potentially at risk. Often it happens in violation of the law. Organizational actions become simplified through the “freezing” of social, economic, and other connections, rendering basic institutions and organizations vulnerable. Economic structures, like the “producer-supplier-consumer” chain, come under attack. The state, shocked by the lack of control, transitions to the illusion of omnipotence by involving law enforcement and power structures, while society delegates decision-making to the state in a state of panic.

The amortization of the wave height gives rise to waves and reflected waves in all aspects of society, primarily in economic, social, cultural, and political spheres. These ‘mesowaves’ (if we use the metaphor of the Strugatsky brothers) may seem to extinguish the global ‘wind.’ However, they also create a new crisis environment in all areas of society, laying the foundation for future upheavals.

The **second stage** of the “freezing” of connection and the replication of the crisis wave in all aspects of society is further intensified by the polarization of “friend or foe” imagery, leading to potential destruction and chaos. The second echelon

of society’s defense systems, involving discipline and legalized violence, faces either complete “freeze” and questionable legitimacy of actions by the masses or the formation of a social base for future upheavals. This can manifest as domestic impulsive offenses, such as family violence and looting, or shadow violations that destabilize the structure of society. It may also lead to transitions towards authoritarian or even totalitarian systems of government, illegal changes in ownership, and new configurations of society’s structure and international relations. Digitalized information spaces, such as the Internet, become crucial arenas for imitation and transformation of connectedness during pandemics. These virtual spaces give rise to new meanings and brilliant works. They serve as platforms for consumption, education, and the creation of social relations in the form of phantoms. Crisis fosters the emergence of hyperreality as a “refuge” for individuals seeking escape and connection.

The **third stage** builds upon the foundation established during the first stage and fully develops by the end of the second stage. It is characterized by interactions in the context of international and global waves of the crisis, involving diplomats, customs and border guard services, and politicians — the “third echelon.”

While the previous two stages were likened to tsunamis, the third stage represents a storm in the crisis spaces of global and international relations. As a result, the “country,” and later the countries affected by the epidemic, face closure by the international community, leading to a simultaneous “freeze” of imports from and limiting of exports to these countries. The international wave of the crisis escalates, causing further damage.

The second wave operates in the opposite direction. When an epidemic emerges in a secondary country during a pandemic, it leads to a reduction in exports and imports to and from that country. Meanwhile, in the primary affected countries, the phase of recovery from the pandemic may begin, prompting them to seek ways to offset their economic and political crisis at the expense of the “offender” countries that did not provide support or exacerbated internal crises. These countries, effectively managing the pandemic, become ex-

pansionist players in risky economic and political zones, leveraging the resonator of “us and them” during the crisis (those who provide assistance in times of crisis are considered allies, while others are perceived as strangers). The macroeconomic and macropolitical map of the world is undergoing significant changes as a result.

Thus, the confrontation transforms into a long-term trend, where the countries involved in crisis resolution utilize a combination of “soft” and “smart” power, and sometimes “hard” power. These global interactions and influences intensify the dynamics of “whirlpools” of internal political and economic processes within each country, and the possibility of global cataclysms like wars and revolutions cannot be ruled out. As a result, countries and international relations undergo structural changes, affecting institutions, communities, and overall functioning. During this stage, global and mass relations play a significant role in shaping cross-state spheres that transcend national boundaries, because the crisis calls for comprehensive, global solutions to address challenges in various domains and regions.

The pandemic’s impact in the first two stages, followed by the storm in the third and whirlpools in the fourth, is causing significant changes in the world, and it will undoubtedly be transformed in various ways.

The perspective for future research lies in comprehending the dynamics, stages, and phases of crisis waves, examining the mechanisms of replication and scaling from the medical crisis (pandemic) to the transformation of crisis phenomena into other spheres of life and international relations. Understanding the crisis mechanisms within the dynamics of “tsunami,” “storm,” and “whirlpools” aims to develop a modeling scheme for real social interactions, exploring temporality, strategies, and tactics for effective actions in global emergencies across various levels of social decision-making.

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REFERENCES

- Benedict, T., Richter, J., & Gast, A. (2019). The influence of misinformation manipulations on evaluative conditioning. *Acta Psychologica*. <https://doi.org/10.1016/j.actpsy.2019.01.014>
- Bessi, A. (2017). On the statistical properties of viral misinformation in online social media. *Physica A: Statistical Mechanics and Its Applications*, 469, 459–470. <https://doi.org/10.1016/j.physa.2016.11.012>
- Brodel, F. (2006). *Material civilization, economy and capitalism, the fifteenth to eighteenth centuries* (Y. N. Afanasiev, Trans.; 2nd ed., Vol. 1). Ves Mir.
- Butler, R. (1999). *Jean Baudrillard: The Defence of the Real*. SAGE.
- Campbell, A. (2020). An increasing risk of family violence during the Covid-19 pandemic: Strengthening community collaborations to save lives. *Forensic Science International: Reports*, 2, 100089. <https://doi.org/10.1016/j.fsir.2020.100089>
- Chia, T., & Oyeniran, O. I. (2020). Human health versus human rights: An emerging ethical dilemma arising from coronavirus disease pandemic. *Ethics, Medicine and Public Health*, 14, 100511. <https://doi.org/10.1016/j.jemep.2020.100511>
- Ecker, U. K. H., Hogan, J. L., & Lewandowsky, S. (2017). Reminders and repetition of misinformation: helping or hindering its retraction? *Journal of Applied Research in Memory and Cognition*, 6(2), 185–192. <https://doi.org/10.1016/j.jarmac.2017.01.014>
- Gilligan, J., & Gologorsky, Y. (2019). #Fake News: Scientific research in the age of misinformation. *World Neurosurgery*, 131, 284. <https://doi.org/10.1016/j.wneu.2019.08.083>

- Goodell, J. W. (2020). COVID-19 and finance: Agendas for future research. *Finance Research Letters*, 35, 101512. <https://doi.org/10.1016/j.frl.2020.101512>
- Gorbunin, V. (2018). *Zovnishnye i vnutrishnye stanovishe Ukraini u 2017 roci* [Ukraine's External and Internal Situation in 2017]. Folio.
- Health, L. C. & A. (2020). Pandemic school closures: risks and opportunities. *The Lancet Child & Adolescent Health*, 4(5), 341. [https://doi.org/10.1016/s2352-4642\(20\)30105-x](https://doi.org/10.1016/s2352-4642(20)30105-x)
- Huzhva, A. (2020, April 2). Klitschko's lies about the epidemic. The situation has taken an unexpected turn. *Granite of Science*. <https://un-sci.com/ru/2020/04/02/lozh-klichko-ob-epidemii-situacziya-pri-obrela-neozhidannyj-povorot/>
- Mikhalchenko, M. I. (2004). *Ukrayina yak nova istorichna realnist: zapasnij gravec Yevropi* [Ukraine as a new historical reality: a reserve player in Europe]. Vidrozhennia.
- Kramer, J. B., Brown, D., & Kopar, P. K. (2020). Ethics in the time of Coronavirus: Recommendations in the COVID-19 Pandemic. *Journal of the American College of Surgeons*, 230(6), 1114–1118. <https://doi.org/10.1016/j.jamcollsurg.2020.04.004>
- Leontief, W. (1936). Quantitative input and output relations in the economic systems of the United States. *The Review of Economics and Statistics*, 18(3), 105. <https://doi.org/10.2307/1927837>
- Lewandowsky, S., Ecker, U. K. H., & Cook, J. (2017). Beyond misinformation: Understanding and coping with the “post-truth” era. *Journal of Applied Research in Memory and Cognition*, 6(4), 353–369. <https://doi.org/10.1016/j.jarmac.2017.07.008>
- Lippert, A. (2020). Ensuring effective and quality care during a pandemic. *Journal of Nursing Regulation*, 11(1), 58–60. [https://doi.org/10.1016/s2155-8256\(20\)30062-4](https://doi.org/10.1016/s2155-8256(20)30062-4)
- Lorenz, K. (1994). *Aggression, or the So-Called Evil* (G. F. Schweinik, Trans.). Univers.
- Mitra, D., & Ulubaşoğlu, M. (2016). The political economy of development in a globalizing world. *International Review of Economics & Finance*. <https://doi.org/10.1016/j.iref.2015.10.020>
- Nye, J. S., Jr. (2009). *Soft Power: The Means To Success In World Politics*. Hachette UK.
- Prachand, V. N., Milner, R., Angelos, P., Posner, M. C., Fung, J. J., Agrawal, N., Jeevanandam, V., & Matthews, J. B. (2020). Medically necessary, Time-Sensitive Procedures: scoring system to ethically and efficiently manage resource scarcity and provider risk during the COVID-19 pandemic. *Journal of the American College of Surgeons*, 231(2), 281–288. <https://doi.org/10.1016/j.jamcollsurg.2020.04.011>
- Schabas, M. (2015). Political Economy, History of. In *International Encyclopedia of the Social & Behavioral Sciences*. <https://doi.org/10.1016/b978-0-08-097086-8.03033-6>
- Schwartz, S. J. (2020). Editorial: Studying the effects of the coronavirus pandemic on intercultural relations. *International Journal of Intercultural Relations*, 76, 52. <https://doi.org/10.1016/j.ijintrel.2020.04.001>
- Shaw, R., Kim, Y. K., & Hua, J. (2020). Governance, technology and citizen behavior in pandemic: Lessons from COVID-19 in East Asia. *Progress in Disaster Science*, 6, 100090. <https://doi.org/10.1016/j.pdisas.2020.100090>
- Sokolova, M. (2019, October 25). World-renowned scientist Antonio Nicaso arrived in Odessa. *Public Surf*. <https://www.priboi.news/obshchestvenno-vazhnoe/uchenyj-s-mirovym-imenem-antonio-nikaso-pribyl-v-odessu/>
- State Statistics Service of Ukraine. (2018). *Employed population by types of economic activity in 2012–2018*. https://www.ukrstat.gov.ua/operativ/operativ2014/rp/zn_ed/zn_ed_u/zn_ed_2013_u.htm
- The Economic Wallop of COVID-19: Q&A with RAND Experts. (2020, March 26). RAND. https://www.rand.org/blog/2020/03/the-economic-wallop-of-covid-19-qa-with-rand-experts.html?utm_source=WhatCountsEmail&utm_medium=RAND%20Policy%20Currents+AEM:%20%20Email%20

Address%20NOT%20LIKE%20DOT-MIL&utm_campaign=AEM:631600804

Titov, V. (Director). (1980). *Open Book*. Gosteleradio USSR. <https://www.imdb.com/title/tt0075554/>

Warrillow, S., Austin, D., Cheung, W., Close, E., Holley, A., Horgan, B., Jansen, M., Joynt, G., Lister, P., Moodie, S., Nichol, A., Nicholls, M., Peake, S., Skowronski, G., Streat, S., White, B., & Willmott, L. (2020). ANZICS guiding principles for complex decision making during the COVID-19 pandemic. *Critical Care and Resuscitation*, 22(2), 98–102. <https://doi.org/10.51893/2020.2.sa1>

Yang, Y., Zhang, H., & Chen, X. (2020). Coronavirus pandemic and tourism: Dynamic stochastic general equilibrium modeling of infectious disease outbreak. *Annals of Tourism Research*, 83, 102913. <https://doi.org/10.1016/j.annals.2020.102913>

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CYBERCRIME

AS THE NEWEST PHENOMENON

OF INFORMATION AND COMMUNICATION SOCIETY

AND THE MEANS OF ITS PREVENTION

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ABSTRACT

The purpose of the research is to analyze cybercrime as the most recent phenomenon of the information society, induced by the technological breakthrough of the Fourth Industrial Revolution, which brought risks and challenges to all mankind. Objective of the study is the theoretical analysis of a rather complex and dangerous phenomenon of cybercrime, the occurrence of which is caused by a dynamic process of criminal use of disruptive technologies in selfish purposes of criminals for the enrichment and unlawful use. Cybercriminals are regularly updating techniques and tools to apply the latest technology to their illegal activities. Today, criminals are developing their clandestine mobile radio telecommunications systems in all countries and are demonstrating the highest level of technical expertise to improve them and in doing so outperform the defenders of law and order. Nowadays cybercriminals are practicing hacking into hundreds of millions of dollars' worth of accounts, and they are far ahead of the curve. Thus, today we must realize the threatening scale of both organized cybercrime and terrorist organizations, to which governments have fallen out of favor as they turn on the people. The control of cybercrime in the



information space acts as an object of research. The subject of the study includes ways to overcome the challenges and threats spread in cyberspace.

Keywords

cybercrime, information technology, information space, complex systems, risks and threats

INTRODUCTION

The significance of this research topic is rooted in our existence within an interconnected world, where individuals are inherently linked or exposed to vulnerability due to the pervasive presence of cybercrime in the information landscape. Cybercriminals have developed an extensive arsenal of methods and tactics for financial gain, often targeting digital data under their control. This situation poses a pervasive threat to the integrity of information, particularly as it accumulates during the “big data revolution” (Drewer & Miladinova, 2017; see also Antonescu & Birău, 2015; Brewster et al., 2015; Eddolls, 2016).

The ubiquity of vulnerable computer systems underscores that the imminent technological peril can no longer be disregarded. It is crucial to recognize that the issue lies not in the inherent malevolence of technology itself, but rather in the imperative to comprehend its vulnerabilities. Consequently, a broad spectrum of critical information infrastructures, which sustain the functioning of society, faces imminent threats (Rodofile et al., 2019; see also Alcaide & Llave, 2020; Maglaras et

al., 2018; Mansfield-Devine, 2017; Onyeji et al., 2014). Moreover, the risks associated with artificial intelligence and synthetic biology compound the challenge.

It is indisputable that scientific and technological advancements, including breakthrough technologies, offer tremendous benefits to humanity. However, to thrive securely in this era, we must confront the technological risks that invariably accompany progress. This underscores the pressing need to safeguard cyberspace, which holds greater relevance than ever in the context of modern civilization’s evolution (Andriukaitiene et al., 2017).

Research Objectives:

- Examining the complexities associated with digital risk management within the backdrop of the coronavirus crisis.
- Assessing the vulnerabilities and opportunities linked to the misuse of digital identities.
- Illustrating the growth of transnational organized cybercrime as a formidable enterprise.
- Unveiling the conducive factors fostering the expansion of organized cybercrime and strategies for its containment.

RESEARCH METHODOLOGY

The systemic method and approach entail viewing cybercrime phenomena and processes as interconnected and holistic entities, guided by a procedural-genesis multisystem perspective. This approach considers these phenomena as integral components,

with their unity established through the analysis of functions, mechanisms, interconnections, and processes that merge into a cohesive cyberspace system, contingent upon specific tasks, objectives, and programs. In this framework, every element within the cybercrime subsystem can be categorized as an individual constituent of the overarching system, characterized by its multifaceted processes and interrelationships that manifest within the broader and interconnected world.

The method of analysis and synthesis is explicated as an elementary constituent parts or components of the general system, united as a result of analyzing elements, subjects, objects of cybercrime, which occur in the actual information environment in the conditions of globalization (Voronkova, 2010). In the process of analyzing the topic under study, we managed to obtain reliable knowledge about the processes of the investigated reality, relying on analytical and synthetic methods and techniques. Analytics has helped to bring all the disparate facts, inferences and arguments into a system to obtain knowledge that is true and reliable. The method of comparison played a great role, providing an opportunity to cognise the object of study from those dispositions which enabled it to be distinguish it from other objects or subjects, to show similarities with related objects and models, to discourse and summarise their essence and direction, to determine the properties and characteristics of the object under study information society. Thanks to the methods and approaches that have been used, it has been possible to to formulate scientific and conceptual knowledge of the battle against cybercrime in the information space, embedded in them epistemological scientific knowledge and relations between the object-subjects of the investigated sphere. As pointed out by Oleg Maltsev (2018), the scientific possibility of a scientist lies in the fact that they take responsibility for the investigation of an abstract category (phenomenon, problem, etc.) and, stage by stage, transform it into an applied category.

Conducting cybersecurity research demands a systematic and methodical approach to analyze and safeguard information systems. The fundamental steps and principles of cybersecurity research methodology include:

1. **Defining the Object of Study:** Clearly specifying the information systems or networks under examination, encompassing network infrastructures, applications, databases, and other relevant elements.
2. **Formulation of Goals and Objectives:** Clearly defining the study's goals, such as identifying vulnerabilities, assessing protection levels, analyzing current cyber threats, etc. This involves formulating specific objectives to be achieved in the research process.
3. **Selection of Research Methods:** Choose research methods aligned with the defined objectives. This could involve employing techniques such as vulnerability scanning, log analysis, penetration testing, statistical data analysis, and other relevant approaches.
4. **Information Collection and Analysis:** Gather data through activities like network traffic analysis, log examination, configuration auditing, code analysis, etc. Analyze the collected information to identify potential threats and vulnerabilities.
5. **Risk and Threat Assessment:** Evaluate the identified risks and threats to the information system. This encompasses analyzing the likelihood of incidents, assessing potential consequences, and gauging the system's vulnerability.
6. **Development of Security Enhancement Recommendations:** Derive security enhancement recommendations from the study's findings. This could involve suggesting the adoption of new technologies, software upgrades, staff training, and other relevant measures.
7. **Report Creation:** Generate a comprehensive report detailing the study's outcomes, encompassing identified vulnerabilities, recommended security enhancements, and an overall analysis of the cybersecurity landscape.
8. **Implementation of Solutions:** Upon approval of the recommendations, execute the proposed security enhancement solutions to fortify the cybersecurity framework.
9. **Monitoring and Adaptation:** Implement a security monitoring system to monitor shifts in threat levels and evaluate the efficacy of implemented measures. Adjust the security strategy to align with evolving requirements and emerging threats.
10. **Training and Awareness:** Provide training for

personnel and enhance awareness of cybersecurity threats to mitigate the risk of human error.

A flexible and responsive cybersecurity research methodology is essential given the dynamic nature of cyber threats. Regular security audits and updates to the methodology to align with emerging trends and threats are crucial elements of an effective approach to cybersecurity research.

RESULTS

1. Challenges of Digital Risk Management in the Context of the Coronavirus Crisis

As the analysis shows, the COVID-19 pandemic has, on the one hand, dramatically accelerated the digital transformation globally, by some estimates by five years or even more. On the other hand, it has led to a similarly rapid increase in digital risks. Companies are now more susceptible to online threats due to increased contact, resulting in more issues, which include data privacy, public health. Due to increasing attacks by hackers, people's fears and anxieties are increasing, involving people in phishing operations, downloading malware through deception. More worrying in the midst of a pandemic are threats of cyber-attacks on hospitals with ransom demands and theft of intellectual property from vaccine manufacturers. None of this is new: awareness of cyber risks increased before the pandemic. Geopolitical tensions and new opportunities for cyberattacks have triggered new agendas by states, non-state actors, blurring the distinction

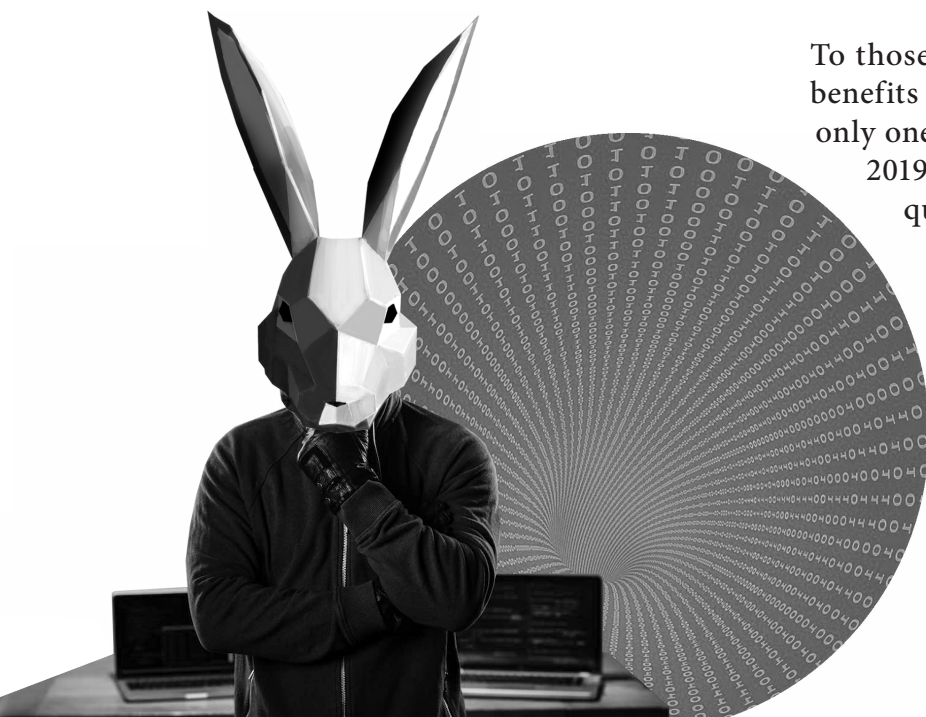
between spies and malicious hackers. The World Economic Forum recognised this threat as early as 2019, placing cybersecurity among the most dangerous risks of our time next to climate change. However, the scale and landscape of threats are changing rapidly. For countries looking to reap the benefits of digital transformation, cybercrime is just one of many digital risks. The role of technology in spreading disinformation is no longer a matter of explanation, and not just in the United States. Experts fear that so-called "deepfakes" (an image synthesis technique based on artificial intelligence) can inflame political tensions by spreading disinformation that is difficult to refute (Newitz, 2019). Artificial intelligence fear is increasing as a result of accelerated automation of some professions, strengthening of gender and racial bias, and the so-called "black box" problem — when artificial intelligence makes decisions that even its creators cannot explain (Goodman, 2016).

The transition to a hyperconnected world offers billions of citizens a unique opportunity to gain improved access to education, healthcare, labor market and financial services. In the current decade, we will witness an acceleration of digitalisation, an increase in the challenges associated with it, and an ever-changing digital risk landscape (Broadhead, 2018; Tsakalidis et al., 2019). The question is: will governments be able to become more agile and able to adopt more comprehensive approaches to risk management and digital strategy quickly to reap the benefits of this acceleration while limiting risks?

2. Risks and Potential of Digital Identity Abuse

To those countries seeking to capitalize on the benefits of digital transformation, cybercrime is only one of many digital risks (Nikitenko et al., 2019). The technologies involved are already quite mature. For example, security and encryption algorithms such as two-factor authentication and asymmetric encryption improve data integrity and privacy.

Artificial intelligence, machine learning and biometric sensors integrated into mobile devices are significantly reducing fraud. They can also



improve technology by scanning fingerprints, face or voice. In addition, recently developed specialized open source software, solutions based on an open application programming interface (API) solutions and international standards are reducing the cost of national digital identity programmes. Technology providers are already ahead of the curve, and the next generation of identity solutions is just around the corner. Some countries, including Estonia, are beginning to test blockchain-based identity cards. This potentially breakthrough technology could transfer control and ownership of data from governments to citizens while preserving the prerogative of governments to issue and validate ID cards and related services. However, the risks and potential for digital identity abuse remain real and require careful and ongoing attention from policy makers and regulators (Goode, 2019; Olivero et al., 2020). While the pandemic has undoubtedly made the benefits of digital identities clear, it has also highlighted the dangers of digital identity and it has also highlighted the dangers that threaten privacy when combined with other technologies such as tracking applications. No matter what technologies are used, successful digital identity systems must be secure, inclusive, and mutually compatible in order to have a transformative impact on billions of people (Oleksenko, 2019).

3. Development of Transnational Organized Cybercrime as a Huge Business

Transnational organized crime is now a huge business that earns \$2 trillion dollars a year: the money comes from drug trafficking, intellectual property theft, trafficking in human beings, child pornography, identity theft, human and contraband goods, gaining access to private email accounts (Boddy, 2018), including Gmail, access to the password system, which allowed users to log in to a number of services Google and successfully hack into databases around the world.

The company has repeatedly been in the crosshairs of dodgy hacking firms, with hackers back in 2010 stealing the text of a password management system programme that allowed users to log into different Google apps at the same time. The theft caused panic among senior executives at Google, a company that prides itself on the security

of its users and their personal data and has built a reputation for ensuring that safety. The agency has a policy of buying information about vulnerabilities and paying the highest price for it, as well as conducting offensive cyber operations that could defeat them. The cyber army is being pushed by large-scale espionage operations targeting defence companies. In general, according to experts, organised crime, which forms modern corporate structures, creates from 15 to 20% of global GDP (Glenny, 2012). Local criminal networks and groups, quickly gather and adjust to exploit any illegal opportunities and channels for their illicit activities, well structured and self-regulating, create clearing houses (intermediaries, financial institutions offering a variety of settlement services), guarantee illegal products or stolen information. Criminal corporations have online tutorials on all critical issues and skills, from problems with overcoming firewalls to cloning credit cards. Criminals have access to online courses created by corporations where they learn how to run companies from phishing, spread spam, and use blanks to create malware, learning the craft of digital crime and cyber fraud. The cyber underground world has created a kind of "Wikipedia" with detailed links categorising how to hack all available devices, software and operating systems. Cybercriminals are much more powerful and forward-thinking, more successful and technologically prepared criminal teams that provide themselves with high profits at relatively low risk. Judicial investigations of cybercrime are extremely rare because convictions account for less than a thousandth of a per cent of all criminal sentences. Cybercriminals continue to carry out aggressive cyber operations aimed at stealing information, with hacker counterattacks being most active in the banking sector (Punchenko & Punchenko, 2019).

4. Conditions For The Development Of Organised Cybercrime And Ways To Stop It

So-called criminal enterprises create their own structures, always using their own jurisdiction of offshore zones or countries with weak state governance and unstable political regimes, which are ready to turn a blind eye to the illegal activities of criminal structures for a certain fee (Harris, 2015). Within these criminal syndicates, labour and supply management departments, department

heads, external consultants and execution teams are formed. Hackers are improving and demonstrating their skills in hacking into technology, while continuing their constant search for new technologies, and cybercrime is on the rise while companies lack the technical resources to protect themselves. There is a market for cyber hackers who develop and sell spyware (software) and hacking tools as much as U.S. government developments. The spyware of cyber underground members can monitor a computer, copy files and record every word, technological innovation is emerging from the underground world and thriving, and collective criminal intelligence is steadily taking over from anti-virus companies. Software losses. Today, when we are confronted with the facts of the poor state of the world's software, programmers say that there is no perfect software, as it will be broken no matter what it is (Schwab, 2017). Users seek powerful, multifunctional software, making security a priority and a key component of reliable computing. This problem is growing as more and more devices begin to communicate with each other and software errors, security flaws are all cumulative in the context of the global information network. For this reason, 75% of computer systems can be hacked in a matter of minutes (Cherep & Lubenets, 2010). Given that software drives the global economy and all critical infrastructures, from electricity to telephone networks, governments have no time to waste. Governments should help companies realize that, taking a long-term view, it is in their interest to create more secure and stable software necessary for a general technological future and refusing to do this will have dire consequences for them.

5. Legal Framework for Cyber Security in Ukraine

The establishment of market relations in Ukraine, informatisation and intellectualisation of production, the growing level of competition between economic agents, which is not always of a bona fide nature, contribute to the growing importance of information in all spheres of society. The process of expanded production of information resources, their use and protection, starting from the middle of the twentieth century, ensured the transition to the information society, where human efforts are increasingly less focused on the production of material values, and at the same time communica-

tions and information processing become relevant. In the conditions of modernisation of information relations, constant expansion of possibilities of using the information space of the Internet, development of competitive economic activity, the problem of protection of information about production, technologies, management, financial and other activities in the sphere of economic activity, as well as the security of society and the state as a whole, is as acute as ever. It is relevant to adopt the Law of Ukraine "On the Basic Principles of Cybersecurity of Ukraine" dated 5 October 2017, which defines the legal and organizational basis for ensuring the protection of vital interests of a person and a citizen, society and the state, national interests of Ukraine in cyberspace (On The Basic Principles of Cybersecurity of Ukraine, 2017). The legal basis for ensuring cyber security of Ukraine consists of the Constitution of Ukraine, the laws of Ukraine regarding the foundations of national security, the foundations of domestic and foreign policy, electronic communications, protection of state information resources and information, the requirement to protect which is established by law. The legal basis for cyber security in Ukraine consists of the laws of Ukraine, the Convention on Cybercrime, other international treaties agreed to be mandatory by the Verkhovna Rada of Ukraine, decrees of the President of Ukraine, acts of the Cabinet of Ministers of Ukraine, and other legal and regulatory acts adopted in pursuance of the laws of Ukraine. For example, the EU Convention on Cybercrime (ETS No. 185 dated 23 November 2001 No. 994_575, ratified by the Verkhovna Rada of Ukraine on 7 September 2005) recognises that EU countries are concerned that computer networks and electronic information can be used to commit criminal offenses and therefore believe that a joint criminal policy aimed at protecting society from cybercrime by creating appropriate legislation and strengthening international cooperation is a priority. Cyber espionage, as defined by the Law of Ukraine — is espionage carried out in cyberspace (virtual space), which provides opportunities for communications and/or the realization of social relations, formed as a result of the functioning of compatible (connected) communication systems and the provision of electronic communications using the Internet and/or other global data transmission networks or its use. Accordingly, cyber defense is

supposed to be used against cyber attacks, which is a set of organisational, legal, engineering and technical measures, as well as cryptographic and technical information protection measures aimed at preventing cyber incidents, detecting and protecting against cyber attacks, eliminating their consequences, restoring the permanence and reliability of the functioning of communication and technological systems (Lee, 2019).

DISCUSSION

Cybersecurity stands as a crucial advancement in the information and communication society, gaining significance amid rapid technological development and the widespread use of the Internet and digital systems. It involves safeguarding computer systems, networks, data, and information from a range of threats, including hacker attacks, viruses, malware, phishing, cyber espionage, and more.

Key facets of cybersecurity and strategies for prevention encompass:

1. **Promoting Awareness:** It is essential for users and organizations to enhance their understanding of diverse threats and protective measures. This involves educating employees on security issues and adhering to fundamental precautions.
2. **Anti-virus Software and Firewalls:** Utilizing anti-virus software and firewalls plays a crucial role in identifying and preventing malware and unauthorized connections.
3. **Authentication and Access Control:** Numerous attacks result from insufficient authentication and access control. Implementing robust passwords, two-factor authentication, and effective access rights management can substantially diminish vulnerability.
4. **Frequent Updates and Patches:** Consistent updates to operating systems and application software play a vital role in addressing known vulnerabilities.
5. **Incident Monitoring and Detection:** The presence of effective incident monitoring and detection systems is crucial for preventing and responding to potential cyber attacks.
6. **Education and Training:** Establishing a cybersecurity culture commences with education. Individuals need awareness about fundamental principles of internet safety and the ability to recognize and thwart cyber threats. Education should cover both foundational and advanced cybersecurity techniques.
7. **Network Defense:** A robust cybersecurity foundation relies on effective network defense. This involves employing anti-virus software, firewalls, intrusion detection systems (IDS), DDoS attack defense systems, and data encryption. Consistent updating and vigilant system monitoring are also imperative.
8. **Legal and Regulatory Compliance:** Adhering to cybersecurity legislation and regulations relevant to your organization is crucial. This encompasses safeguarding personal data, fulfilling incident notification obligations, and more.
9. **Access Control:** Restricting access to information and resources to the essential minimum contributes to lowering the risk of data breaches and unauthorized access.
10. **Regular Data Backups:** Consistently backing up crucial data facilitates information recovery in the event of an attack or incident.
11. **Monitoring and Incident Detection:** The establishment of monitoring and incident detection systems aids in recognizing unusual activities and promptly responding to them.
12. **Adherence to Best Practices:** Abide by cybersecurity recommendations and guidance from organizations specializing in the field. Regularly update your systems and processes in accordance with current standards.
13. **Incident Preparedness:** Creating and testing an incident response plan is crucial for enabling your organization to respond swiftly and effectively to cyber attacks.
14. **Collaboration and Information Sharing:** Estab-

Cybersecurity is a crucial innovation in the information and communication society, gaining in-

lishing collaboration with other organizations and law enforcement to exchange information on cyber threats and incidents is vital.

Cybersecurity is a continuous process demanding ongoing attention and effort. In the dynamic threat environment, staying vigilant and adapting to new challenges is of paramount importance.

1. **Multi-Factor Authentication:** Implementing Multi-Factor Authentication (MFA) or Two-Factor Authentication (2FA) strengthens the security of account and system access by necessitating two or more methods to verify a user's identity.
2. **Vulnerability Assessment:** Consistently scanning your systems and applications for vulnerabilities can pinpoint potential entry points for attacks, allowing for remediation before attackers can exploit them.
3. **Block Unwanted Traffic:** Employ tools like Intrusion Detection and Prevention Systems (IDPS) and anti-malware systems to filter out undesired traffic, thereby minimizing the risk of attacks.
4. **Data Preservation and Archiving:** Proficient data management encompasses safeguarding, long-term storage, and compliant destruction in adherence to regulations and legislation.
5. **Auditing and Monitoring:** Conducting regular security audits and system monitoring aids in the identification of unauthorized access and other potential threats.
6. **Threat Intelligence Systems:** Employing Threat Intelligence systems enables organizations to stay abreast of the latest cyber threats and attacks, facilitating the development of more effective cybersecurity strategies.
7. **Social Engineering:** Instructing employees to identify social engineering, recognized as one of the most potent attack methods, is crucial in thwarting attacks.
8. **Experience Sharing:** Collaborating and exchanging information with other organizations and industries contributes to refining methods for safeguarding against and preventing cyber threats.
9. **Cybersecurity Monitoring Services:** Numerous organizations leverage third-party cybersecurity monitoring services to bolster their capacity for detecting and preventing attacks.

10. **Internet of Things (IoT):** Emphasizing the security and regular updates of IoT devices is crucial to prevent potential attacks through these devices.

11. **Continuous Improvement:** The realm of cybersecurity demands continual enhancement and adaptation to address evolving threats and technologies. Organizations should routinely assess and refine their practices and strategies.

With the cyber threat landscape rapidly evolving, the importance of preventing attacks and safeguarding information has never been more critical. Cybersecurity is an ongoing process, requiring sustained attention and efforts. In the face of the ever-changing threat environment, staying vigilant and adapting to new challenges is imperative.

CONCLUSIONS

To safeguard the future of technology and address the growing threats it poses to humanity, it is imperative to take proactive measures. This entails enhancing government oversight of the escalating cybercrime activities across networks.

Elevating security standards and ensuring cybersecurity is paramount, irrespective of the sophistication of technology or internet services. The digital underground is agile and prepared to employ innovative tools, with a primary focus on monetary gains through substantial yet precision-targeted thefts that challenge authority and disregard regulations and laws. This encompasses activities such as malware creation, the stimulation of innovation for criminal purposes, exploration of new avenues for cybercrime against businesses, and the development of novel methods for cyber exploitation.

The state must devise a comprehensive set of technical, organizational, and educational recommendations as part of its information policy to mitigate the risks associated with technology. It should determine how to harness various tools to maximize benefits while minimizing adverse consequences. This approach is crucial for successfully navigating the trials of technological progress.

In the context of the modern society and economy, trust in the cyberspace is indispensable. With the surge in threats, including daily data breaches orchestrated by hackers, the state's protective capabilities are stretched thin, while businesses often lack the technical resources to fend off cyberattacks.

Therefore, it is imperative to bolster state oversight in combating cybercrime, ensuring enhanced security standards, and guaranteeing robust cybersecurity for critical state infrastructure. The state should articulate an effective national security strategy, including the public disclosure of information about hackers and the reinforcement of defensive measures to counter cybercriminal attacks, bolstered by cyber defense forces.

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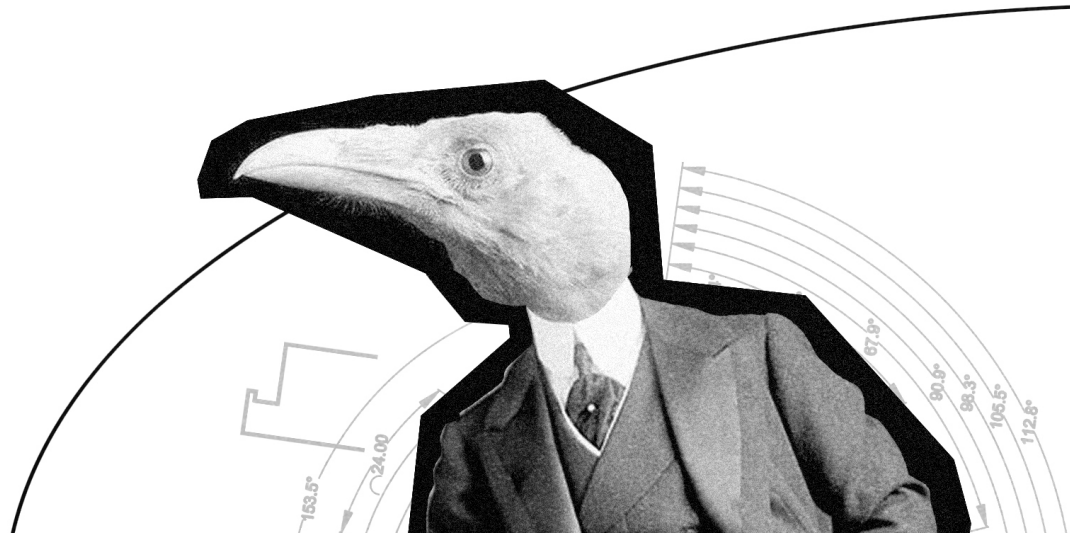
REFERENCES

- Alcaide, J. I., & Llave, R. G. (2020). Critical infrastructures cybersecurity and the maritime sector. *Transportation Research Procedia*, 45, 547–554. <https://doi.org/10.1016/j.trpro.2020.03.058>
- Andriukaitiene, R., Voronkova, V., Kivlyuk, O., Romanenko, T., & Rizhova, I. (2017). Conceptualization of smart society and smart technologies in the context of the development of modern civilization. In *Mokslas Ir praktika: Aktualijos Ir Perspektyvos* (pp. 11–12). Lietuvos sporto universitetas.
- Antonescu, M., & Birău, R. (2015). Financial and non-financial implications of cybercrimes in emerging countries. *Procedia. Econom-*

- ics and Finance*, 32, 618–621. [https://doi.org/10.1016/s2212-5671\(15\)01440-9](https://doi.org/10.1016/s2212-5671(15)01440-9)
- Boddy, M. (2018). Phishing 2.0: the new evolution in cybercrime. *Computer Fraud & Security*, 2018(11), 8–10. [https://doi.org/10.1016/s1361-3723\(18\)30108-8](https://doi.org/10.1016/s1361-3723(18)30108-8)
- Brewster, B., Kemp, B., Galehbakhtiari, S., & Akhgar, B. (2015). Cybercrime. In *Application of Big Data for National Security* (pp. 108–127). <https://doi.org/10.1016/b978-0-12-801967-2.00008-2>
- Broadhead, S. (2018). The contemporary cybercrime ecosystem: A multi-disciplinary overview of the state of affairs and developments. *Computer Law & Security Review*, 34(6), 1180–1196. <https://doi.org/10.1016/j.clsr.2018.08.005>
- Cherep, A. V. & Lubenets, I.O. (2010). Konceptualni zasadi ekonomichnoyi bezpeki pidpriyemstv [Conceptual Bases Of Economic Security Enterprises]. *Bulletin of Zaporizhzhia National University. Economics*, 1(5), 63–66.
- Drewer, D., & Miladinova, V. (2017). The BIG DATA Challenge: Impact and opportunity of large quantities of information under the Europol Regulation. *Computer Law & Security Review*, 33(3), 298–308. <https://doi.org/10.1016/j.clsr.2017.03.006>
- Eddolls, M. (2016). Making cybercrime prevention the highest priority. *Network Security*, 2016(8), 5–8. [https://doi.org/10.1016/s1353-4858\(16\)30075-7](https://doi.org/10.1016/s1353-4858(16)30075-7)
- Glenny, M. (2012). Organized Crime In A Network Society. *Journal of International Affairs*, 66(1), 145–149. <http://www.jstor.org/stable/24388256>
- Goode, A. (2019). Digital identity: solving the problem of trust. *Biometric Technology Today*, 2019(10), 5–8. [https://doi.org/10.1016/s0969-4765\(19\)30142-0](https://doi.org/10.1016/s0969-4765(19)30142-0)
- Goodman, M. (2016). *Future Crimes: Everything Is Connected, Everyone Is Vulnerable and What We Can Do About It*. Corgi Books.
- Harris, S. (2015). *WAR: The Rise of the Military-Internet Complex*. Houghton Mifflin Harcourt.
- Lee, L. (2019). Cybercrime has evolved: it's time cyber security did too. *Computer Fraud*

- & *Security*, 2019(6), 8–11. [https://doi.org/10.1016/s1361-3723\(19\)30063-6](https://doi.org/10.1016/s1361-3723(19)30063-6)
- Maglaras, L. A., Kim, K., Janicke, H., Ferrag, M. A., Rallis, S., Fragkou, P., Maglaras, A., & Cruz, T. (2018). Cyber security of critical infrastructures. *ICT Express*, 4(1), 42–45. <https://doi.org/10.1016/j.icte.2018.02.001>
- Maltsev, O. V. (2018). *Vekovoj obman* [The Age-Old Deceiving]. Serednyak T. K. <https://books.google.com.ua/books?vid=ISBN6177696635>
- Newitz, A. (2019). The real fake menace. *New Scientist*, 244(3256), 24. [https://doi.org/10.1016/s0262-4079\(19\)32160-8](https://doi.org/10.1016/s0262-4079(19)32160-8)
- Nikitenko, V., Andriukaitiene, R., & Puchenko, O. (2019). Formation of sustainable digital economical concept: challenges, threats, priorities. *Humanities Studies*, 1(78), 140–153. <http://dx.doi.org/10.26661/hst-2019-1-78-11>
- Oleksenko, R. (2019). Position and role of modern economic education as the main megatrend of innovative development of Ukraine. *Humanities Studies*, 2(79), 169–181. <https://doi.org/10.26661/hst-2019-2-79-11>
- Olivero, M. A., Bertolino, A., Mayo, F. J. D., Escalona, M. J., & Matteucci, I. (2020). Digital persona portrayal: Identifying pluridentity vulnerabilities in digital life. *Journal of Information Security and Applications*, 52, 102492. <https://doi.org/10.1016/j.jisa.2020.102492>
- On the basic principles of cybersecurity of Ukraine: the Law of Ukraine of October 5, 2017 No. 2163-VIII. No. 45. art. 403. (2017) <https://zakon.rada.gov.ua/laws/show/2163-19#Text>
- Onyeji, I., Bazilian, M., & Bronk, C. (2014). Cyber security and critical energy infrastructure. *The Electricity Journal*, 27(2), 52–60. <https://doi.org/10.1016/j.tej.2014.01.011>
- Punchenko, O., & Punchenko, N. (2019). Basic strategic technology of intellectual duality of humanity in information technology. *Humanities Studies*, 2(79), 95–114. <https://doi.org/10.26661/hst-2019-2-79-07>
- Rodofile, N. R., Radke, K., & Foo, E. (2019). Extending the cyber-attack landscape for SCADA-based critical infrastructure. *International Journal of Critical Infrastructure Protection*, 25, 14–35. <https://doi.org/10.1016/j.ijcip.2019.01.002>
- Schwab, K. (2017). *The Fourth Industrial Revolution*. Penguin UK.
- Tsakalidis, G., Vergidis, K., Petridou, S., & Vlachopoulou, M. (2019). A cybercrime incident architecture with adaptive response policy. *Computers & Security*, 83, 22–37. <https://doi.org/10.1016/j.cose.2019.01.011>
- Voronkova, V. G., & Sosnin, O. V. (2015). *Formuvannya informacijnogo suspilstva v ukraini: viklik chi potreba chasu?* [Formation of the information society in Ukraine: challenge or necessity of the time? present need]. *Humanities Bulletin of Zaporizhzh State Engineering Academy*, 60, 13–24.
- Voronkova, V. H. (2010). *Filosofiya globalizaciyi: socioantropologichni, socioekonomichni ta sociokulturni vimiri* [The philosophy of globalization: the socioanthropological, socioeconomic and sociocultural dimensions]. DIG Publishing.
- Voronkova, V., Kapitanenko, N., & Nikitenko, V. (2019). Legal principles of intellectual property protection in the digital society. *ScienceRise: Juridical Science*, 4(10), 32–37. <http://dx.doi.org/10.15587/2523-4153.2019.188163>

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THE AUTHORS OF THE EUROPEAN PSYCHOPATHIC EPIDEMIC

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ABSTRACT

The COVID-19 pandemic related European hysteria of 2020 has a definite starting point. March 16 was the opening of a new order and new rules making in Europe. An unprecedented violation of the Schengen Agreement (first time in the history of the European Union) as a consequence of which Germany closed its borders. As it is known, afterward, Germany introduced an unusual quarantine. As a consequence of such precedent, these kinds of human control methods (targeted specifically on people, not the COVID-19) scaled all over the European Union and followed by some countries of Eastern Europe, in particular Ukraine. However, March 16 is a historical date for another off-radar reason. On March 16 a controversial article was published on the website of the Imperial College of London (Ferguson, 2020), which considerably influenced the decision-making process in European states and became one of the triggers of the psychopathic epidemic in western and eastern Europe. Materials published on the Imperial College of London website enabled elected officials to

justify any measures with quarantine, which drove to significant economic consequences and generated unprecedented panic of populations. The invisible enemy and uncertain future, decorated and mutilated to some extent by the media, plunged Western and Eastern Europe into awe. The report of the scientific team led by Professor Ferguson (Neil Morris Ferguson) from Great Britain is the central object of this journalistic investigation.

Keywords

COVID-19, pandemic, expert opinion, critical evaluation

INTRODUCTION

Today we are all witnessing the effects that are caused by the pandemic (Campbell, 2020; Chia & Oyeniran, 2020; Goodell, 2020; Health, 2020; Schwartz, 2020;



Yang et al., 2020). No small responsibility for the panic lies with the media, whose degree of influence is only confirmed with each new study in various fields (Bushman & Whitaker, 2017; see also Mudrick et al., 2016; Schlesinger, 2015; Vaterlaus et al., 2015; Walker, 2016; Wiedeman et al., 2015). However, the media are only repeaters. Who, then, are the actual creators of this content?

Every investigation is preceded by a prerequisite. In my particular case, the catalyst was the widespread dissemination of forecasts made by certain Ukrainian scientists, whom I suspect were aligned with the government's objectives in justifying stringent quarantine measures in Ukraine. The first simulation and evident instance of misleading the Ukrainian public emerged when the official website of the Kyiv City State Administration published news claiming that the National Academy of Sciences of Ukraine had projected a potential coronavirus infection count of up to 22 million in the country (*Protocol No. 16.PDF*, 2020). This news received extensive coverage from national media outlets, which, driven by their need to survive, seemed to prioritize disseminating information without due regard for its quality or potential consequences (Huzhva, 2020). Even the acting Director General of the Center for Public Health of the Ministry of Health of Ukraine, Ihor Kuzin, fell for the same misinformation (Shuster online, 2020).

One would expect that after such a fake had been exposed, the situation would have stabilized, prompting people to contemplate the actual state of affairs. However, instead of pursuing scientific rigor and conducting a comprehensive investigation,

Ukrainian scientists, regrettably, appeared to “prophesise”, offering contradictory statements. Notable among these scientists is Prof. Olga Golubovskaya from Bogomolets National Medical University and the L. V. Gromashevsky Institute of Epidemiology and Infectious Diseases of the National Academy of Medical Sciences of Ukraine (*Coronavirus will infect 30 million Ukrainians, we will face a severe COVID-19 scenario. Interview with Olga Golubovskaya, 2020*).

One might think that I am being overly critical, but as a young scientist and corresponding member of the Ukrainian Academy of Sciences, I am acutely aware that forecasts projecting potentially tens of millions of coronavirus infections in Ukraine should be based on a well-defined methodology. However, none of the Ukrainian “prophets” have provided such a methodology, at least not one that has been presented thus far. Consequently, the forecasts lack a solid foundation and seem to be limited to a ceiling figure of 80% infected within the territory of Ukraine. I became curious about the origin of this forecast and whether there was a proper basis for it. In the absence of a proper methodology and the inability to generate their own forecasts, it is likely that Ukrainian scientists borrowed these projections from external sources. Upon investigation, I discovered that British scientists were the source of this projection. At this point, I must urge readers to avoid sarcasm or generalizations about “British scientists,” as it would be unfair to paint all scientists from Britain with the same brush. Nonetheless, it was indeed British scientists who initiated the forecast about 80% of infected individuals, and this scaremongering was not only propagated by the media but also endorsed by

representatives of academia who may even not have examined Professor Ferguson's research materials.

METHODS

Before delving into a comprehensive critical evaluation of the outlined issues, it is imperative to explore diverse methodologies for analyzing situations related to coronavirus disease 2019 (COVID-19). This exploration may encompass various methods and approaches to assess the virus's spread, the effectiveness of control measures, and their impact on public health and society.

Various methods are employed to analyze the 2019 coronavirus crisis:

1. Epidemiological analysis involves evaluating the spread of the virus, encompassing factors such as transmission rate, incubation period, and incidence.
2. Investigating clusters and infection sources to pinpoint potential points of origin.
3. Utilizing mathematical models in spread modeling to forecast the virus's future dissemination and evaluate the effectiveness of control measures.
4. Conducting scenario analysis to evaluate how various factors impact epidemic dynamics.
5. Surveillance of morbidity and mortality involves monitoring illness and death rates to gauge the epidemic's severity. This includes analyzing potential shifts in disease patterns and identifying risk groups.
6. Genetic analysis of the virus entails studying its genetic characteristics to identify mutations and potential alterations in properties. This helps determine the extent of strain diversity and its implications for vaccination.
7. Assessing the effectiveness of control measures involves analyzing outcomes from interventions like quarantine, social distancing, and vaccination. This includes evaluating the cost-benefit ratio of the implemented measures.
8. Conducting economic analysis involves evaluating the epidemic's economic repercussions on various sectors and society at large. This includes assessing the effectiveness of economic support measures.
9. Social analysis entails evaluating the epidemic's impact on social structures, mental health, and public opinion. This involves examining social inequalities and how they are exacerbated during the pandemic.
10. Communication analysis is employed to assess the effectiveness of communication strategies employed by authorities and the media in informing the public. It also involves evaluating risk perception and adherence to recommendations.
11. Evaluation of vaccination involves assessing the efficacy of vaccination programs and the extent of population coverage. This includes monitoring potential side effects and ensuring the safety of vaccines.
12. Analysis of the health situation involves evaluating the preparedness and capacity of health systems to handle the surge in illness. This encompasses assessing resource utilization, access to care, and the effectiveness of the testing system.
13. International analysis includes comparing control strategies and measures implemented by various countries. This also involves studying international cooperation in sharing information, experiences, and medical resources.
14. Analyzing population behavior involves studying how the public responds to control measures and health recommendations. This includes examining the social and cultural factors influencing adherence to precautionary measures.
15. Technology analysis entails utilizing technology for tracking virus spread, contact tracing, and monitoring morbidity.
16. Assessing the effectiveness of digital solutions involves analyzing how well these technological tools prevent the spread of the virus.
17. Predicting future trends involves utilizing data and models to anticipate potential scenarios for a given situation. Strategies and control measures can then be adjusted based on projected changes.
18. Conducting socio-economic analysis entails evaluating the pandemic's impact on labor employment, businesses, and economic stability. This includes examining economic recovery measures post the easing of restrictions.

A comprehensive analysis of the pandemic situation necessitates an integrated approach, involving the collaboration of various areas of expertise. These research methods facilitate a better comprehension of the virus's characteristics, the efficacy of implemented measures, and the pandemic's impact on health, society, and the economy. The amalgamation of these methods contributes to a more thorough

understanding of the COVID-19 situation and aids in the development of more effective strategies to combat the pandemic. In light of the established methodology, the next step involves an analysis of the current Covid-19 situation. Particularly crucial is the examination of how this situation is portrayed in the media by certain figures in the scientific community and the resulting consequences of such representations.

This article will undertake an investigative analysis of various facts related to the dissemination of information about the pandemic to the general public. The aim of this investigation is to empower discerning individuals to scrutinize the presented facts and formulate their own conclusions.

RESULTS

Commencing with a fundamental scientific principle, it is essential to acknowledge that research founded on inaccurate initial data will inevitably yield errors. Intentionally doing so provides a model and the requisite mathematical calculations, offering a potential avenue for manipulating information. This article does not seek to draw conclusions for the reader; instead, its focus is on spotlighting key facts often overlooked or unasked by the average reader. Consequently, the investigation has led to the following conclusions:

1. The simultaneous writing and publication of the scientific article on COVID-19 raise concerns about its thoroughness and peer review. The authors presented global statistics without sufficient evidence or independent verification, questioning the reliability of their conclusions.
2. The article appears more as a manifesto than a scientifically reviewed paper. Lack of peer review and failure to seek independent professionals for editing raise questions about its objectivity and credibility.
3. Unfounded allegations throughout the article, such as comparing COVID-19 to the 1918 H1N1 influenza pandemic, without proper substantiation, raise doubts about the scientific rigor of the authors.
4. The use of a South Asian model for predicting the UK situation lacks transparency in methodology. Transferring mathematical models without accounting for regional differences in living

standards, climate, and culture is a significant concern.

5. The reliance on “expert clinical judgment” for predicting deaths lacks transparency about the experts’ identities. The simplistic logic behind estimating a 50% death rate in intensive care raises questions about the validity and accuracy of the study.

DISCUSSION

Source of Hysteria No1: Nicholas Lewis

In various professional environments, there are individuals who attempt to present themselves as experts to profit from different industry products. I personally refer to such entities as vultures, capitalizing on sensationalism, “hyping” and exploiting various topics for their selfish goals. Nicholas Lewis, in my view, falls into this category. He is primarily known for debunking major climate-related news stories, presenting himself as a crusader for “truth,” albeit with financial motivations. His ability to generate sensationalism out of seemingly insignificant information makes him appealing to various media outlets, including the BBC (McGrath, 2018). For many journalists, it is challenging to grasp complex issues quickly, and thus, Nicholas Lewis, as a self-proclaimed “translator” of academic science for the general public, satisfies the media’s need for attention-grabbing content and higher ratings.

Nicholas Lewis identifies himself as an independent scientist in climate science, statistics, probability, and the physics of global warming. While seemingly unrelated to COVID-19, epidemiology, and virology, he released an article on April 1 titled “Imperial College UK COVID-19 numbers do not seem to add up” (Lewis, 2020). This move stirred hype on social media and in the media. The crux of the article involves criticizing the research conducted by Ferguson’s team. According to mathematician Nicholas Lewis, the number of COVID-19 victims will be at least 30% higher than the forecast of British scientists. Curiously, when inquiring about COVID-19 forecasts in Ukraine, four scientists referred to Nicholas Lewis’s forecast, seemingly aiming to protect the reputation of Prof. Golubovskaya, Prof. Zadorozhnaya, and other speakers. I hold the belief that these individuals might be contributing to the psychopathic epidemic

in Ukraine. Nonetheless, It would have been better if they had not sent me this link.

Resembling Show-Business Rather Than Scientific Endeavor

Professor Neil Morris Ferguson et al. (2020), a renowned epidemiologist and infection modeler from the United Kingdom, focuses on evaluating the consequences of epidemics and employing mathematical modeling. His research spans various infections, including influenza and MERS Coronavirus. Ferguson is a trusted advisor to governments and international organizations, offering insights on epidemiological strategies. His team of researchers commonly employs mathematical models to forecast the progression of epidemics and assess the efficacy of diverse control measures, including quarantine, social distancing, and vaccination.

One of his most notable achievements was the development of a model to project the spread of COVID-19 in the UK. Critical components of his contributions encompass:

- Mathematical modeling: Formulating mathematical models that capture the infection dynamics within diverse population segments.
- Epidemic forecasting: Employing models to anticipate the quantity of cases, disease severity, and mortality across various scenarios.
- Assessing the effectiveness of control measures: Examining the influence of diverse measures, including quarantine and vaccination, on curbing the virus's spread.
- Exploring various epidemic scenarios to enhance comprehension and offer recommendations.
- Offering guidance and recommendations to governments and international organizations grounded in their research findings. However, it is important to acknowledge that in academia and among experts, opinions can vary.

Positive facets of Professor Neil Morris Ferguson's contributions:

- Ferguson possesses advanced expertise in the mathematical modeling, facilitating the provision of valuable forecasts and estimates.
- His endeavors in epidemiology and modeling significantly influence public health decision-making,

playing a crucial role in shaping strategies for infection control.

- The scientist is frequently sought as a consultant by governments and international organizations, indicating the acknowledgment of his expertise in the field.
- Ferguson promptly addresses novel challenges, offering valuable assessments that assist governments and international organizations in taking urgent measures.
- His research and expert opinions garner extensive media attention, effectively spotlighting public health issues for the general public.

Critique and alternative perspectives:

- Some critics contend that Ferguson's models may not consistently encompass a diverse range of scenarios, potentially resulting in over- or underestimated predictions.
- Models are susceptible to parameter choices, and slight alterations in assumptions can markedly impact results.
- Some experts highlight that Ferguson's models predominantly concentrate on medical aspects, affording minimal attention to the social and economic ramifications of interventions.
- Detractors also raise concerns about the clarity and replicability of the models by other researchers. Model Uncertainty: The mathematical models utilized by Ferguson occasionally rely on assumptions that might be incomplete or variable, introducing uncertainty into the predictions.
- Some critics contend that Ferguson's models may diverge from actual data, potentially reducing their accuracy in predicting real-world events.
- Alternative perspectives suggest that Ferguson's models may demonstrate less adaptability to a changing situation and a rapidly evolving epidemic.
- Critics may also highlight that Ferguson's recommendations could involve drastic measures, such as prolonged quarantine periods, leading to questions about their practicality and feasibility.

It is crucial to recognize that debate and discourse within scientific circles are inherent to the research process. Critiques play a vital role in refining methods and models, while alternative viewpoints contribute to a diverse comprehension of a problem. After examining both favorable and unfavorable critiques

of his work, it is pertinent to delve into an analysis of the present circumstances, taking into account the scientist's methodology, its applicability in this context, and other relevant aspects that contribute to a comprehensive understanding of the situation.

According to the official website of Imperial College of London, a group of scientists led by Professor Ferguson was established in December 2019. I will refrain from delving into conspiracy theories and solely emphasize that the first clinical case of the new virus was recorded only on January 13. Normally, such groups are formed within the first 3–5 days of the onset of an epidemic, not a month before it occurs. Additionally, it is worth noting that the highly contentious forecast of 80% of the UK population potentially contracting the coronavirus was published on the Imperial College of London website on March 16 (Ferguson et al., 2020). The activities of Ferguson's group during the three months from December 2019 to mid-March 2020 remain unclear. However, it is evident that this prediction emerged shortly after the UK leadership decided against implementing quarantine measures, opting for a collective immunity strategy. In the following analysis, we will scrutinize the main inconsistencies present in the report.

1. The Scientific Article Was Both Written and Published on the Same Date. It is highly unusual in the academic and expert environment. To draw conclusions that impact an entire nation, it is imperative to thoroughly scrutinize the accuracy of the conclusions and methodology. Independent reviewers and editors are usually involved for this purpose. The article explicitly states, "As of March 16, 2020, 164,837 cases and 6,470 deaths have been confirmed worldwide." You can verify the publication date on the website yourself. Such instances are often associated with rush situations where there is an urgent need to publish specific material. However, Ferguson's group had more than three months, so we cannot claim that they lacked sufficient time. Notably, the forecast emerged after the first confirmed cases of coronavirus in the UK. Ideally, such groups are expected to develop tactics to prevent epidemiological situations, but Ferguson's group appeared to fall short of accomplishing this task, or they might not have prioritized it at all.

2. The Article can be Described More as a Manifesto Rather than a Scientific Article. Even

Nicholas Lewis, in his post, highlighted the fact that the article was published without peer review, which is quite unusual. Even if there was a time constraint, it would have been feasible to seek independent professionals over the following weeks to edit and review the article. However, this step was not taken, which leaves us with no option but to view the article as the subjective opinion of a group of individuals. Whether these individuals are experts remains a separate and crucial question, but we will not delve into that within the scope of this article.

3. Unfounded Allegations. The article includes several completely unfounded allegations, and there are various examples of such instances throughout the text. To captivate the readers and maintain their attentiveness to the content of a vast analytical paper with numerous graphs and mathematical statistical models, the authors employ a specific trick: they begin with a bold statement without providing any evidence or proof. For instance, they assert that "The global impact of COVID-19 has been profound, and the public health threat it represents is the most serious seen in a respiratory virus since the 1918 H1N1 influenza pandemic." However, throughout the article, the authors fail to substantiate this statement in any manner. This technique is more frequently observed in political journalism rather than scientific writing. Its primary purpose is to garner maximum attention to the material presented.

4. South Asian Model for Predicting the Situation in the UK. It is one of the central issues concerning the Ferguson group. A crucial aspect of any calculations and forecasts is to provide a valid description of the methodology used. Failing to do so may result in simulations rather than well-founded conclusions. However, Ferguson's group seems undeterred by this concern, stating that they modified a customized simulation model developed for pandemic flu planning. The most intriguing aspect is that they obtained data for the forecast from a 2005 study concerning South Asia (Ferguson et al., 2005). Unfortunately, the article does not explain how the mathematical models from South Asia can be transferred to the UK context, given the significant differences in living standards, climate, culture, sociology, mentality, and psychology between these regions.

5. Aristotelian Logic. The calculation method used by the Ferguson group to predict the number

of deaths is based on what they call “expert clinical judgment,” estimating that 50% of those in intensive care will die. For such a crucial study that impacts the lives of millions of people, it is essential to know who is behind these private opinions. Even without knowing the names of the individuals involved, it is evident that this assumption is merely a subjective opinion. Moreover, the 50% estimate seems to follow a simplistic “either the patient will die or survive” logic, which raises concerns about the validity and accuracy of their approach. I believe there is no need to provide any commentary on the last statement.

Subsequent diagrams and mathematical calculations may hold appeal primarily for individuals like Nicholas Lewis. This statement is not based on my role as a journalist or corresponding member of the Ukrainian Academy of Sciences. As someone with a background as a graduate and certified master of I. I. Mechnikov ONU, specializing in “economic mathematics,” I recognize that achieving the desired statistics can be accomplished by using false initial data as the foundation of any research. Consequently, this approach allows one to have both the model and the required mathematical calculations at their disposal.

CONCLUSIONS

The events that unfolded after March 16, such as the deep economic crisis, border closures, draconian quarantine measures, increased domestic violence, partial amnesties, and a surge in criminality, are well known to all. The purpose of this article is not to discredit any specific groups or individuals like the Ferguson group, Nicholas Lewis, or Ukrainian figures in science. Instead, it aims to encourage rational and thoughtful individuals to examine all the facts presented and draw their own conclusions.

It is also worth mentioning the unprecedented financial injections into several European countries, particularly the record-high quantitative easing (QE) in the UK, amounting to 645 billion pounds. Readers are advised to consult their financial advisors to understand the implications of such measures. Additionally, the emergence of Verint class programs, which received support from the Ukrainian government at the level of the Prime Minister on April 8th, raises questions about their impact on individuals' lifestyles.

Interested individuals are encouraged to study these programs themselves (Threat Intelligence Analytics Platform, 2020).

In conclusion, I would like to quote from Benjamin Franklin: “Those who would give up essential Liberty, to purchase a little temporary Safety, deserve neither Liberty nor Safety.”

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REFERENCES

- Bushman, B. J., & Whitaker, J. L. (2017). Media influence on behavior. In *Reference Module in Neuroscience and Biobehavioral Psychology* (pp. 571–575). <https://doi.org/10.1016/b978-0-12-809324-5.06481-6>
- Campbell, A. (2020). An increasing risk of family violence during the Covid-19 pandemic: Strengthening community collaborations to save lives. *Forensic Science International: Reports*, 2, 100089. <https://doi.org/10.1016/j.fsir.2020.100089>
- Chia, T., & Oyeniran, O. I. (2020). Human health versus human rights: An emerging ethical dilemma arising from coronavirus disease pandemic. *Ethics, Medicine and Public Health*, 14, 100511. <https://doi.org/10.1016/j.jemep.2020.100511>
- Coronavirus will infect 30 million Ukrainians, we will face a severe COVID-19 scenario. Interview with Olga Golubovskaya.* (2021, April). Obozrevatel. <https://www.obozrevatel.com/Society/koronavirusom-zarazyatsya-30-mln-ukraintsev-nas-zh-det-tyazhelyij-stsenarij-covid-19-intervyu-s-olgoj-golubovskoj.htm>
- Goodell, J. W. (2020). COVID-19 and finance: Agendas for future research. *Finance Research Letters*, 35, 101512. <https://doi.org/10.1016/j.frl.2020.101512>

- Ferguson, N. M., Cummings, D. a. T., Cauchemez, S., Fraser, C., Riley, S., Meeyai, A., Iamsirithaworn, S., & Burke, D. S. (2005). Strategies for containing an emerging influenza pandemic in South-east Asia. *Nature*, 437(7056), 209–214. <https://doi.org/10.1038/nature04017>
- Ferguson, N., Laydon, D. J., Gilani, G. N., Imai, N., Ainslie, K. E. C., Baguelin, M., Bhatia, S., Boonyasiri, A., Perez, Z. C., Cuomo-Dannenburg, G., Dighe, A., Dorigatti, I., Fu, H., Gaythorpe, K. a. M., Green, W., Hamlet, A., Hinsley, W., Okell, L., Van Elsland, S., . . . Ghani, A. (2020). Report 9: Impact of non-pharmaceutical interventions (NPIs) to reduce COVID19 mortality and healthcare demand. <https://doi.org/10.25561/77482>
- Health, L. C. & A. (2020). Pandemic school closures: risks and opportunities. *The Lancet Child & Adolescent Health*, 4(5), 341. [https://doi.org/10.1016/s2352-4642\(20\)30105-x](https://doi.org/10.1016/s2352-4642(20)30105-x)
- Lewis, N. (2020). *Imperial College UK COVID-19 numbers don't seem to add up*. Nicholas Lewis. <https://nicholaslewis.org/imperial-college-uk-covid-19-numbers-dont-seem-to-add-up/>
- McGrath, B. M. (2018, November 20). Climate change: Concerns over report on ocean heating. *BBC News*. Retrieved April 10, 2020, from <https://www.bbc.com/news/science-environment-46046067>
- Mudrick, M., Miller, M., & Atkin, D. (2016). The influence of social media on fan reactionary behaviors. *Telematics and Informatics*, 33(4), 896–903. <https://doi.org/10.1016/j.tele.2016.01.005>
- Protocol No. 16.PDF. (2020, March 21). Official Portal of the KCSA. https://kyivcity.gov.ua/news/protokol__16_postiyno_komisi_teb_ta_ns_pro_zapobigannya_poshirennyu_gostro_respiratorno_khvorobi_COVID-19_sprichineno_koronovirusom_SARS-CoV-2_ta_vvedennya_dodatkovikh_obmezhuvalnikh_zakhodiv_na_teritori_mista_kiyeva_401359/protokol__16/
- Schlesinger, P. (2015). Mass media and cultural identity. In *International Encyclopedia of the Social & Behavioral Sciences* (pp. 707–711). <https://doi.org/10.1016/b978-0-08-097086-8.95042-6>
- Schwartz, S. J. (2020). Editorial: Studying the effects of the coronavirus pandemic on intercultural relations. *International Journal of Intercultural Relations*, 76, 52. <https://doi.org/10.1016/j.ijintrel.2020.04.001>
- Huzhva, A. (2020, April 2). Klitschko's lies about the epidemic. The situation has taken an unexpected turn. *Granite of Science*. <https://un-sci.com/ru/2020/04/02/lozh-klichko-ob-epidemii-situacziya-priobrela-neozhidannyj-povorot/>
- Shuster online. (2020, March 27). “Between 7 and 22 million people in Ukraine may get the coronavirus,” Igor Kuzin [Video]. Facebook. <https://www.facebook.com/shuster-online/videos/712554612816796/>
- Threat Intelligence Analytics Platform. (2020, April 3). Cognyte. <https://cis.verint.com/product/%20combating-the-covid-19-pandemic>
- Vaterlaus, J. M., Patten, E. V., Roche, C., & Young, J. A. (2015). #Gettinghealthy: The perceived influence of social media on young adult health behaviors. *Computers in Human Behavior*, 45, 151–157. <https://doi.org/10.1016/j.chb.2014.12.013>
- Walker, C. (2016). The direction of media influence: Real-estate news and the stock market. *Journal of Behavioral and Experimental Finance*, 10, 20–31. <https://doi.org/10.1016/j.jbef.2016.02.001>
- Wiedeman, A. M., Black, J. A., Dolle, A. L., Finney, E. J., & Coker, K. L. (2015). Factors influencing the impact of aggressive and violent media on children and adolescents. *Aggression and Violent Behavior*, 25, 191–198. <https://doi.org/10.1016/j.avb.2015.04.008>
- Yang, Y., Zhang, H., & Chen, X. (2020). Coronavirus pandemic and tourism: Dynamic stochastic general equilibrium modeling of infectious disease outbreak. *Annals of Tourism Research*, 83, 102913. <https://doi.org/10.1016/j.annals.2020.102913>

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THE GLOBAL NOTION OF "CONTRACT KILLER": IMPACT OF REGIONAL ADAPTATIONS

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ABSTRACT

The purpose of this article is to explore the concept of a "contract killer" ("hitman") by analyzing scientific knowledge and research conducted by the Memory Institute, including field research conducted by Expeditionary Corpus (special unit of the Memory Institute), under the leadership of Ph D. Oleg Maltsev. The Expeditionary Corpus focused its research in 2019 on the philosophy of Southern Italy. By combining insights from various sources, this article aims to shed light on the intricacies of the "contract killer" concept and provide a comprehensive understanding of the phenomenon within

the context of Southern Italy's philosophical backdrop. This article also considers the fundamental differences between a serial killer (maniac) and a contract killer (hitman).

Keywords

contract killer, hitman, serial killer, criminal organizations, criminal tradition of Southern Italy

INTRODUCTION

This article examines case studies from regions such as Southern Italy, Southern Africa, and Imperial



Russia to illustrate the origin, tactics, and training systems that directly influence the psychological profile of contract killers. Various interdisciplinary studies focus on the criminogenic situation in these regions (Auckloo & Davies, 2019; Breen et al., 2019; Kollmann, 2020; Nese et al., 2018; Terranova et al., 2017). The concept of contract killers or “hitmans” as we envision them today emerged in the turbulent 1990s (known as: dashing 90s”), a period marked by pervasive coercion. The article explores the origins and training of hitmen, as well as the distinctions between contract killers and serial killers, commonly referred to as “maniacs.” Emphasize that there is much more modern research devoted to serial killers and serial murder (Hodgkinson et al., 2017; see also Fridel & Fox, 2019; Petherick & Petherick, 2019; Reid, 2017; Yaksic, 2018). It also raises the question of whether society, in some way, contributed to the emergence of this problem. By analyzing these aspects, the article seeks to shed light on the complex phenomenon of contract killers and their role in contemporary society.

The research conducted by Academician Oleg Maltsev and the Expeditionary Corpus, focusing

on the philosophy of the south of Italy, with the research results serving as the foundation for the work “Philosophy of Southern Italy,” provides valuable insights into the training and preparation of assassins (Maltsev & Lunov, 2020). The term “contract killer” implies that these individuals undergo specialized training to carry out their deadly tasks effectively. This notion is supported by the fact that assassinations require careful planning, coordination, and support from a group or organization. Assassins typically do not act alone; they operate as part of a structured group that collaborates to achieve their objectives. Such groups are highly organized.

METHODS

Concerning the content of this article, it is important to highlight that its basis stems from an examination of the philosophies of southern Italy, a research endeavor led by Oleg Maltsev during his fieldwork in the region. This exploration involved Maltsev’s application of a scholarly approach through the utilization of the research concept.

This approach exhibits certain distinctions from the conventional perception of the “work of the modern scientist.” Utilizing this method, the Expeditionary Corps successfully addressed the research problem concerning Southern Italian philosophy, treating it as a comprehensive system encompassing historical, cultural, psychological, anthropological, and prototypical aspects, along with the causes and distinctive features that have shaped it over the centuries. It is emphasized that the resolution of this intricate scientific and philosophical task is unattainable and impractical without the application of the “research concept.”

The distinguished scientist Academician Grigory Popov, during his era (approximately in the 1930s of the 20th century), provided the following definition: “A research concept is essentially an idea converted into a research methodology, refined through scientific transformations to reach an appropriate technologically acceptable level” (Maltsev & Lunov, 2020, p.10).

Without a research concept, scientific work is nonexistent. It is these research concepts that safeguard scientific discoveries. A research concept efficiently economizes the scientist’s time, enabling an immediate commencement of work, unlike methodology. The research concept, as a tool, proves to be more functional and effective compared to methodology. Consequently, it becomes evident that contemporary scientists operate as if “in reverse,” comprehending the ultimate data of the repercussions of the research subject, attempting to reconstruct the causes and establish a methodology.

This process, in reality, takes more than a decade before they engage directly in scientific work.

The schematic representation of the research concept, in accordance with Academician G. S. Popov, as a mechanism for the scientist’s work is illustrated in Figure 1.

Highlighting the benefits of research concept:

- Preserves scientific discoveries.
- Employs a versatile implementation system for application.
- Allows the combination of research concepts to unveil mysteries from both the past and the future.

Utilizing this approach enables us to encompass the extensive facets of criminal traditions in southern Italy. However, within this article, we will delve into distinct examples of origins, tactics, and training systems in various regions, namely southern Italy, southern Africa, and Imperial Russia. The methodologies employed in human training significantly impact the psychological profile of the contract killer, commonly referred to as a “hitman.” Hence, only the conclusions drawn from this comprehensive research on the article’s topic will be presented here.

RESULTS

To start with, let us examine the case of the south of Italy and how criminal organizations emerged and differ from each other. After the revolution

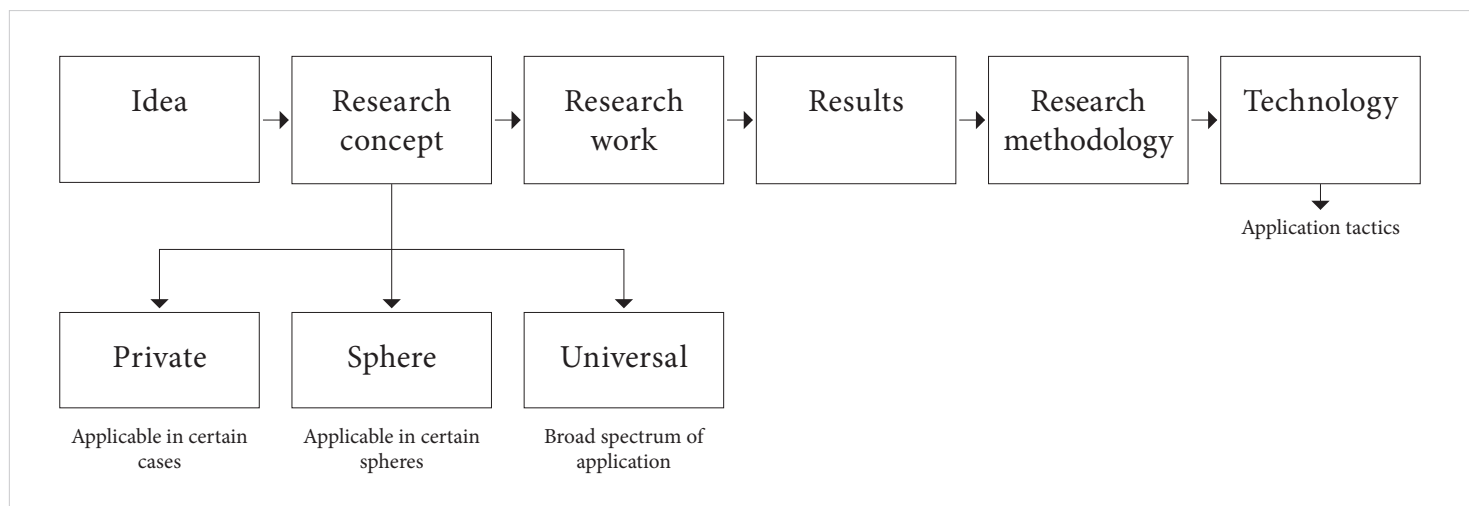


Figure 1. Scheme of the research concept

of 1861, several criminal organizations appeared in the region, including 'Ndrangheta, Mafia, and Camorra. While all these criminal entities are often collectively referred to as "Mafia," it is important to note that the term "Mafia" specifically refers to only one of the three major criminal organizations in the southern part of the country. Each of these criminal groups has distinct characteristics and histories, making them unique entities within the criminal landscape of the region.

The mafia is distinguished by a solitary assassin, also known as the "Beati Paoli," as first mentioned. A prominent illustration of such an individual is depicted in Mario Puzo's novel "The Godfather." The corresponding scene in the movie portrays the dialogue: "Do you live in a bad area? — Not that word. Once a police car with two policemen was stolen from our street". Over time, a retransformation has surfaced, revealing a contemporary hitmans as an individual who may align with a small group, yet the norm remains a solitary figure of great authority. Consequently, the status of such an assassin within a criminal organization is remarkably elevated, akin to a bosun on a ship. Nevertheless, the Mafia still tends to favor a lone killer who excels at executing "his job" (Puzo, 1969).

Unlike the Mafia, the Camorra operates as a gang, consisting of two to five individuals. Although it has undergone transformation, the desire for group dynamics persists, as historically, the Camorra functioned in larger groups of 20–25 members across various territories. The driving psychological force behind a Camorrist is often rooted in revenge. These individuals are renowned for their unruliness and primarily associate their activities with street-level crimes.

'Ndrangheta operates on a family-oriented organizational structure, capable of manifesting in various forms. Its members are motivated by a system that rewards loyalty, abilities, and specific skills. Respected individuals are entrusted with particular tasks within the organization. Similar to the Mafia, 'Ndrangheta also conducts planned training for killers, involving specialized instruction. Having risen quietly over the years, today, 'Ndrangheta stands as the most dominant and influential criminal organization worldwide.

With an annual turnover of 44 billion euros (excluding money laundering proceeds), 'Ndrangheta stands as the wealthiest, most aggressive, and pervasive criminal organization, excelling at infiltrating the economy and government structures. It holds a unique global presence, establishing branches in nearly every region of Italy, across Europe, Africa, Asia, the Americas, and Oceania. Drug manufacturers prefer to collaborate with 'Ndrangheta due to its unmatched reliability: members of this organization don't talk and don't repent. The organization's family-based structure renders it invulnerable, as "blood is not drained or imprisoned" (Gratteri & Nicaso, 2010).

The strength of 'Ndrangheta lies in its inherent nature, characterized by an impenetrable structure and the power of its primary bonds. Within this organization, "repenting" equates to betraying one's own family, leading to moral and psychological repercussions far more severe than the fear of death or retaliation.

The primary internal relationships among Calabrian 'Ndrangheta groups, as previously noted, are built on blood ties — the essence of "blood bonds." Marriages are frequently utilized to resolve violent conflicts or to establish stronger structures. An illustrative example is the marriage between Paolo De Stefano's son and Franco Coco Trovato's daughter in 1992, which further enhanced and empowered the De Stefano family, led by one of the most influential 'Ndrangheta bosses in Lombardy (Badolati, 2014).

In Southern Africa, it is widely recognized that there exist entire organizations solely dedicated to contract killings, known as "killer gangs." One notable example is the "27s," which is part of the three major criminal gangs in the Republic of South Africa, referred to as the "Numbers gang" — "26s," "27s," and "28s" (Pinnock, 2016).

Now let us turn to the history of imperial Russia. In the history of imperial Russia before 1917, there is no record of a character of a "contract killer" in literature, fairy tales, or other folklore. While murders for hire did occur at the level of the Russian nobility, they were typically conducted in the form of legal duels, which cannot be classified



as a profession. Unlike in America, where "bounty hunters" were present, there was no analogous phenomenon in Russia, and the concept of a "contract killer" as a profession did not exist.

Indeed, during a time in Russian history when terror became a political weapon, the first assassins emerged from the Socialist Revolutionary Party (SR). These individuals were characterized by their deep ideological understanding and psychological readiness to sacrifice their lives while remaining committed to executing the organization's tasks at any cost. Prominent examples of their actions include the murders of the Romanov family and Stolypin. The SRs operated on a military-style or-

ganizational model, with cells consisting of 3 to 5 people. While they did engage in robberies, this was considered a secondary occupation. Their primary focus was on the ideology of terror, using violent actions to achieve their political objectives.

After the 1917 Russian Revolution, assassinations for hire evolved and became associated with the state rather than being solely political in nature. Notable instances include the contract killings of General Kutepov P. A. and Trotsky L. D. During Stalin's era, a group of exceptional specialists in hired killings emerged, targeting state officials and officers, some of whom were prominent figures like Yakov Serebryansky and Pavel Sudoplatov. These targeted assassinations were categorized as state operations until the end of the USSR, reflecting the state's involvement in carrying out such acts.

Contract killers, as we know them today, emerged in the early 1990s during a period of economic crisis and mass dismissals of various specialists, instructors, state security officers, and officers from military intelligence subversive centers. This time marked a significant increase in organized crime across the post-Soviet space, leading to a widespread prevalence of hired assassinations. During the 1990s, a surge in contract killings occurred, targeting entrepreneurs, competitors, associates, bankers, and even criminals eliminating their rivals and settling disputes through violent means. Weapons became the primary method to resolve any issues during this chaotic period. It is essential to mention that until 1993–94, the newly independent states of the post-Soviet era were not aware of the existence of organized crime, lacked effective methods to combat it, and, consequently, were unable to effectively counteract it.

The existence of two forms of state security and military can be attributed to the state system's transformation and subsequent retirement, which paved the way for the creation of these syndicates.

We find ourselves in a situation where officers, instructors, and teachers are not the ones being detained, but rather their silent students — the hitmen, who do not tell who trained them. It is reasonable to conclude that we, as a society, have contributed to the creation of this problem that remains relevant today.

As far back as 1893, French sociologist and philosopher Emile Durkheim (1987/1952) introduced the concept of “*anomie*” into scientific discourse. *Anomie* refers to a state of society characterized by the disorganization of social norms and institutions, uncertainty, and instability in the conditions of human action. It also encompasses the discrepancy between the goals proclaimed by society and the limited access to legitimate means of achieving those goals for the majority of people. The desire for accepted success and well-being is hindered by restricted access to socially approved avenues for obtaining success, such as education, profession, status, and wealth.

In essence, economic recessions and widespread layoffs, along with military personnel transitioning to civilian life, can lead individuals who could not achieve certain values through conventional means to reject established rules and seek benefits through any available methods. As a consequence, this results in a significant rise in organized crime.

Criminal behavior is predominantly acquired through communication within groups. The frequency, duration, and intensity of such interactions play a crucial role in the adoption of deviant conduct. Learning criminal behavior follows a similar process as any other form of learning, as explained in the theory of differential association by E. Sutherland (1939).

The current political and economic situation in Ukraine is widely recognized as unstable, leading to a low level of accountability for ammunition and explosive devices. These conditions have facilitated access to firearms, which are now being utilized in contract killings. The chosen method of murder can reveal information about the sex of the criminal, their physical strength, special skills, potential occupation, or other experiences, as well as their ability to handle specific types of weapons.

Indeed, the criminalistic characteristic of contract killings can be described as a comprehensive system of information encompassing the methods of preparation, execution, and concealment of the murder, as well as the distinctive traits of the organizer, intermediary, perpetrator, and victim. This system

also considers the circumstances of the criminal situation, reflecting the established connections between the involved parties. Its primary purpose is to construct and verify hypotheses to address specific investigative objectives effectively.

In 95% of the examined cases, the perpetrators received monetary rewards for carrying out the murders. Among these cases, 45% involved payment in foreign currency, particularly US dollars. Additionally, in certain instances, the employer rewarded the executor with gifts such as apartments, cars, or other valuable assets (Shchukin & Podgol, 2004).

However, it is important to distinguish these contract killers from serial killers, also known as “lone maniacs.” The actions of a trained contract killer differ significantly from those of a serial killer. The methods and preparations employed by a serial killer before committing a crime often involve the following steps: the preliminary selection of the future victim, gaining the victim’s trust, choosing the most opportune time for the crime, procuring a weapon in advance, and planning a premeditated alibi. Serial killers like Anatoly Slivko, Andrei Chikatilo, Serhiy Tkach, and Anatoly Onoprienko are notable examples of individuals who targeted women and children and executed these calculated steps in their crimes (Maltsev et al., 2019).

The factors influencing the formation of a serial killer’s personality can be categorized into two groups. The first group of negative factors includes heredity, lifestyle, and the presence of transferred or existing diseases. The second of negative factors related to family upbringing, psychological and sexual development of an individual.

DISCUSSION

The exploration of criminal organizations involves the engagement of numerous authors from diverse fields of knowledge. Here are a few renowned authors and concepts associated with the examination of this issue:

1. Roberto Saviano (2012) is an Italian journalist and writer, acclaimed for the book “*Gomorrah*,” in which he elucidates the operations of

- the Camorra in Naples and Campania. Saviano extensively researches and analyzes criminal structures, unraveling their profound impact on society.
2. Diego Gambetta (1996) is a researcher, author of "The Mafia Code", which analyzes the structure and internal order of criminal organizations.
 3. Antonio Nicaso: university professor, researcher, speaker and consultant to governments and law-enforcement agencies. He is an author of several books about 'Ndrangheta (Nicaso & Lamothe, 1995).
 4. Nicola Gratteri is an Italian magistrate and author. Considered one of the leading figures in the struggle against the 'Ndrangheta, a struggle in which he has taken an active part since the beginning of his career (Gratteri & Nicaso, 2012).
 5. Arcangelo Badolati (2014) is an Italian journalist and writer. His book "Mamma 'Ndrangheta" is the most comprehensive and exhaustive work written on criminal organizations in the province of Cosenza.
 6. Klaus von Lampe (2015) is an associate professor in the Department of Law, Police Science and Criminal Justice Administration at John Jay College of Criminal Justice in New York City.
 7. Federico Varese (2018) is an Italian professor. He currently teaches criminology at the University of Oxford. He has written about organized crime around the world in books such as *The Russian Mafia* and *Mafias on the Move*.
 8. James Finckenauer (2012) is an organized crime expert, author, distinguished Professor Emeritus at Rutgers University, former director of the National Institute of Justice, Washington



- DC. Dr. Finckenauer is an expert in human trafficking, juvenile and international criminal justice. Author of numerous books on Russian organized crime in the US.
9. John Dickie (2013) is an author, historian and academic. Professor of Italian Studies at University College London. He was the host of the television program *Mafia Bunker*, which aired on the History Channel.
 10. Letizia Paoli (2014) is a criminologist. Since 2006 she has been a professor of the Law Faculty at Katholieke Universiteit Leuven (Belgium). She has published extensively, notably on international drugs trading.
6. Corruption: Examining corruption and the relationships between organizations and officials.
 7. Organized crime techniques: Understanding various types of criminal activities, such as extortion, smuggling, and drug trafficking.
 8. Territorial control: Exploring how mafia groups maintain territorial control and engage in power struggles.
 9. Sociocultural aspects: Studying how criminal organizations manage their image and adhere to the principle of “omerta” (law of silence).
 10. Social Support: Analyzing the impact of criminals on society and understanding reasons for potential support.
 11. Coping strategies: Strengthening law and order: Harsh criminal penalties: Imposing strict penalties on members of criminal organizations.
 12. Asset confiscation: Implementing measures to confiscate assets derived from criminal activities.
 13. Financial monitoring: Introducing rigorous financial monitoring measures to prevent money laundering.

The research conducted by these authors and the concepts they present contribute to a multifaceted perspective on the issue of criminal organizations. This encompasses an examination of their structure, societal repercussions, political entanglements, and viable approaches to counteract them. These authors offer distinct viewpoints on the subject, incorporating sociological, criminological, political, and cultural dimensions of criminal organizations. The amalgamation of their research analyses facilitates the development of a more comprehensive understanding of the problem and potential strategies for combating mafia organizations.

In broad terms, gaining insight into the issue of criminal organizations necessitates a comprehensive approach that considers various aspects of their activities. The following are key elements for a thorough understanding of the problem and strategies to counter it:

1. Social roots, poverty, and unemployment: Examining the social and economic factors contributing to the allure of mafia structures.
 2. Traditional cultural factors: Investigating cultural aspects, such as customs, that may contribute to the support of mafia organizations.
 3. Economic aspects: Analyzing how criminal groups infiltrate legal economic sectors.
 4. Drug and Arms Trafficking: Examining the economic facets of illicit businesses, such as drug and arms trafficking.
 5. Links to political figures: Investigating the influence of mafia groups on political processes and structures.
- The essential distinction between a serial killer (maniac) and a hired killer (hitman) lies in the fact that the former does not need specialized training, whereas the latter requires specific training to avoid imprisonment.
 - A serial killer (maniac) selects their own victims, whereas a hitman does not; they are assigned tasks.
 - A serial killer (maniac) can abandon their criminal intentions as they have no clients or superiors, while a hitman cannot do so due to

An effective strategy to combat criminal organizations must necessarily be comprehensive and multi-layered, taking into account socio-cultural, economic, and political factors.

CONCLUSIONS

The first distinctive quality of the psychological portrait of a contract killer (hitman) is that they have undergone specialized training or acquired certain skills, such as precision marksmanship skills. Despite both serial killers and hired killers intentionally and unlawfully taking the lives of others, there is a significant difference between them.

obligations and a limited timeframe for fulfilling them.

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REFERENCES

- Auckloo, M. B. K. M., & Davies, B. (2019). Post-mortem toxicology in violent fatalities in Cape Town, South Africa: A preliminary investigation. *Journal of Forensic and Legal Medicine*, 63, 18–25. <https://doi.org/10.1016/j.jflm.2019.02.005>
- Durkheim, E. (1952). *Suicide: A Study in Sociology* (J. A. Spaulding & G. Simpson, Trans.). Routledge & Kegan Paul. (Original work published 1897)
- Badolati, A. (2014). *Mamma 'ndrangheta* [Mother 'ndrangheta]. Luigi Pellegrini Editore.
- Breen, A., Daniels, K., & Tomlinson, M. (2019). Adolescent's views on youth gang involvement in a South African Township. *Children and Youth Services Review*, 98, 171–177. <https://doi.org/10.1016/j.childyouth.2018.12.010>
- Dickie, J. (2013). *Mafia Republic: Italy's Criminal Curse. Cosa Nostra, 'Ndrangheta and Camorra from 1946 to the Present*. Hachette UK.
- Finckenauer, J. O. (2012). *Mafia and organized crime: A Beginner's Guide*. Simon and Schuster.
- Fridel, E. E., & Fox, J. A. (2019). The quantitative study of serial murder: Regression is not transgression. *Aggression and Violent Behavior*, 44, 24–26. <https://doi.org/10.1016/j.avb.2018.11.008>
- Gambetta, D. (1996). *The Sicilian Mafia: The Business of Private Protection*. Harvard University Press.
- Gratteri, N., & Nicaso, A. (2010). *Fratelli di sangue* [Blood brothers]. Edizioni Mondadori.
- Gratteri, N., & Nicaso, A. (2012). *La mafia fa schifo. Lettere di ragazzi da un paese che non si rassegna* [The Mafia sucks. Letters from kids from a country that won't resign]. Mondadori.
- Hodgkinson, S., Prins, H., & Stuart-Bennett, J. G. (2017). Monsters, madmen. . . and myths: A critical review of the serial killing literature. *Aggression and Violent Behavior*, 34, 282–289. <https://doi.org/10.1016/j.avb.2016.11.006>
- Kollmann, N. S. (2020). Crime and punishment in the Russian empire. In R. Antony, S. Carroll, & C. Pennock (Eds.), *The Cambridge World History of Violence* (pp. 331–349). Cambridge University Press. <https://doi.org/10.1017/9781316340592.018>
- Maltsev, O. V., Sainchin, O. S., & Sotula, O. S. (2019). *Teoretichni osnovi rozsliduvannya umisnih vbivstv. Psihologichnij portret serijnogo vbivci: Kriminalno-pravovi, kriminalistichni ta psihologichni aspekti* [Theoretical foundations of investigation of premeditated murders: criminal law, forensic and psychological aspects. Psychological portrait of a serial killer]. Accent Graphics Communications & Publishing. <https://oleg-maltsev.com/ru/library/books/psihologicheskij-portret-serijnogo-ubijczy>
- Maltsev, O., & Lunov, V. (2020). *Filosofiya Yuga Italii* [The Philosophy of Southern Italy]. Serednyak T. K. <https://books.google.com.ua/books?vid=ISBN6177822509>
- Nese, A., O'Higgins, N., Sbriglia, P., & Scudiero, M. (2018). Cooperation, punishment and organized crime: a lab-in-the-field experiment in southern Italy. *European Economic Review*, 107, 86–98. <https://doi.org/10.1016/j.euroecorev.2018.05.004>
- Nicaso, A., & Lamothe, L. (1995). *Global mafia: The New World Order of Organized Crime*. Macmillan.
- Paoli, L. (2014). *The Oxford Handbook of Organized Crime*. Oxford Handbooks.
- Petherick, W., & Petherick, N. (2019). Serial murder. In *Homicide* (pp. 115–136).

<https://doi.org/10.1016/b978-0-12-812529-8.00006-9>

- Pinnock, D. (2016). *Gang Town*. Tafelberg.
- Puzo, M. (1969). *The Godfather*. G. P. Putnam's Sons.
- Reid, S. (2017). Compulsive criminal homicide: A new nosology for serial murder. *Aggression and Violent Behavior*, 34, 290–301. <https://doi.org/10.1016/j.avb.2016.11.005>
- Saviano, R. (2012). *Gomorra*. Pan Macmillan.
- Shchukin, V. S., & Podgol, A. I. (2004). *Oso-bennosti kriminalisticheskoy harakteristiki zakaznykh ubijstv* [Features of criminalistic characterization of contract murders]. UO "VGU im. P. M. Masherova."
- Sutherland, E. (1939). *Principles of Criminology*. J. B. Lippincott Company.
- Terranova, C., Bevilacqua, G., Zen, M., & Montisci, M. (2017). Crimes against the elderly in Italy, 2007–2014. *Journal of Forensic and Legal Medicine*, 50, 20–27. <https://doi.org/10.1016/j.jflm.2017.06.005>
- Varese, F. (2018). *Mafia life: Love, Death, and Money at the Heart of Organized Crime*. Oxford University Press.
- Von Lampe, K. (2015). *Organized crime: Analyzing Illegal Activities, Criminal Structures, and Extra-legal Governance*. SAGE Publications.
- Yaksic, E. (2018). The folly of counting bodies: Using regression to transgress the state of serial murder classification systems. *Aggression and Violent Behavior*, 43, 26–32. <https://doi.org/10.1016/j.avb.2018.08.007>

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