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**SOCIOCYBERNETICS: RECONFIGURING THE  
INTELLIGENCE LANDSCAPE**

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**Abstract:**

In the current Information Age societies undergo a continuous structural change, and consequently, ensuring state stability and security has become a more and more difficult challenge in the context of asymmetric warfare techniques and tools being used increasingly often. As such, current analysts and policymakers face the need to revise and adapt their approach, in order to adequately understand the multiple threats appearing routinely and counter them in due time.

This paper aims to propose a new model of framing strategic intelligence analysis by applying principles from the branch of sociocybernetics.

By using this system of thinking, our goal is to help analysts and decisionmakers alike to identify clear social, political, economic patterns of behavior and correct them where necessary, as well as ease the identification of any structural vulnerabilities.

*Key words: intelligence analysis, sociocybernetics, systemic framing, patterns*

## **1. Introduction**

“The reason the enlightened prince and the wise general conquer the enemy whenever they move, and their achievements surpass those of ordinary men is foreknowledge.”- Sun Tzu, *The Art of War*

As the rapid pace of technological advances is accelerating the reshaping of our global structure into a knowledge society, new, multi-layered and interlinked challenges will force practitioners and scholars alike to rethink their thinking system to adapt to the particularities of the Information Era.

Moreover, said challenges are often complex in nature, and do not follow traditional patterns, making them often unpredictable. Ensuring an actor’s security, be it a public or private one, has never been more difficult than in the age of hybrid threats, where “wars waged by other means” are creating new battlefields on uncharted territories such as the cyberspace. Additionally, intelligence analysts are also tasked with simultaneously discerning fake information from real one and connecting the dots under the pressure of time with limited resources, while monitoring any potentially emerging issues.

Naturally, these aspects have encouraged scholars and analysts to turn their focus onto finding the best methodologies to use that can simplify the process of monitoring and combing through vast amounts of datasets, flowing in a constant stream as the world is becoming even more interconnected.

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Perhaps one of the most obvious and relevant solutions to this quest is shifting towards a more systemic perspective, derived from the principles of the already known cybernetic system theory.

Recognizing the knowledge gap between realities on the field changing sometimes instantly, intelligence needs and decisionmakers' information needs to ensure the security of their enterprises or nations, a new concept emerged – sociocybernetics.

Sociocybernetics is a branch of second-order cybernetics, also known as the “cybernetics of observed systems”, which, applied in social-science, facilitates a more orderly understanding of societal processes.

Due to the fact that social sciences pose their specific sets of difficulties in being measured objectively, sociocybernetics is progressing slower than other similar endeavours.

In continuation of this paper we will clarify the concept of sociocybernetics, and then see how it could provide an efficient framework for a more in-depth strategic intelligence analysis, which needs to take into account a large number of factors and individual layers to be accurate.

### **2.Sociocybernetics: the concept**

Using the name itself as starting point, sociocybernetics can be defined as the art of steering society, or a social process.

A problematic aspect for each analyst, particularly in the field of social sciences, is making sense of qualitative data and convert it in valuable knowledge in an objective manner, clean of personal judgement errors or biases. This issue arises from the nature of the field itself, as current measurement instruments cannot quantify human and societal behaviors as support, as easily as in STEM research.

Moreover, as society's linkages were multiplying both vertically and horizontally, scholars noted the discrepancies in social science research becoming a hindrance in other academic endeavours as well, as studies now implied a more cohesive approach for a meaningful impact.

Therefore, anticipating the future need for an integrated approach in studying various social, political or economic events, pioneers such as Buckley, proposed applying the principles used in studying systems to social science research in order to facilitate a more accurate depiction of realities on the field. Though this approach was met with initial scepticism, as the use of information technology in the 1960's was still in its early stages and so were many science branches we see as vital today, the concept's essence was along the years revived under different names either in whole or in part.

As such, sociocybernetics appeared as an attempt to create a framework that synthesises the governing control mechanisms of a social process. Moreover, the International Sociological Association (ISA)'s Research Committee 51 (RC51) defines it as a “systems science in sociology and other social sciences”, due to its comprehensive integration of theory, application, empirical research, methodology, axiology and epistemology in order to systemize and bring added value to the social field.

Since its definition and general purpose allows room for different perspectives on its scientific use, during the years the branch evolved, mandating two “schools of thought” - as first-order or classical and second-order, or modern sociocybernetics.

The first generation, first-order or classical approach focused on developing systems that govern intelligent machines, thus setting the stepping stones to general automation of processes and the development of information theory.

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However, the second generation, second-order or modern approach was focused on creating new methods that facilitate the steering self-organizing and self-referential processes. This new line of thinking was later on tailored to support sociology as a science.

Sociocybernetics' accuracy was questioned in recent years by researchers which refute the idea of living organisms behaving as rationally as an organized system or as orderly.

The present paper's trail of thought is that though free agents cannot be constricted to predefined moves such as on a chessboard, social processes do have repeating patterns of behaviour specific to particular factors such as geographical/historical/cultural elements that can be used on a strategic level to understand the general landscape of an actor's objectives.

Therefore, the following chapter advocates for extracting the main principles that govern sociocybernetics and use them in the creation of a new framework with the aim to facilitate the identification of foreign influence operations in a particular country or region.

### **3. Applied Sociocybernetics for Strategic Intelligence Analysis**

As the international scene saw a transition from unipolarity to an ongoing multipolarity, simultaneously, an accelerated race to the top between state actors was ignited, as alliances and spheres of influence are constantly reconfigured.

The key element for these players to decide their course of action and counter potential threats to their security has been strategic intelligence. Foresight became the most precious resource in preserving a state actors well-being.

For instance, wary of history repeating itself, when faced with Russia's repositioning on the international scene, many Eastern European nations rushed to join the NATO alliance as a preventative measure. In other parts of the world, states used economic tools to prevent growing neighbourly influence such as sanctions against doing business with Iran or the creation of trade networks in the South China Sea to counterbalance China's domination with its Belt and Road Initiative.

Nevertheless, a constant challenge for scholars and practitioners alike has always been defining strategic intelligence itself as a separate concept and distinguishing it from other resources such as competitive intelligence and business intelligence. This is the reason for which there are many contradictory positions on the use and implementation of strategic intelligence. Though there is a general lack of a systematic standardized framework for this resource,

To be effective, a strategic intelligence product must take into account the potential feedback loop of any significant incident that might impact its subject target on the medium and long term. Thus, the analyst can systemize and later on identify any behavioural patterns with ease by simply adapting his or her methodology to the regulatory feedback loop described in detail by systems' theory which we see in cybernetics.

For example, if an analyst is studying Russian influence operations on NATO's Eastern Flank to identify Russia's strategy for the region and determine its short, medium and long-term objectives, he or she would decrease the intelligence process' timeframe significantly by using a sociocybernetic-inspired grid to look for patterns. After observing Russian modus operandi in Ukraine and Georgia, the analyst can create his own frame of indicators and thus connect the dots in other regions faster if said patterns have several common points. The method is particularly useful in identifying political and social influence operations.

Naturally, sociocybernetics does not constitute the only possible systemized approach that could offer support to strategic intelligence analysts. For instance, other

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branches that analyse concepts relating to agents' behaviour in complex systems are catastrophe, chaos or complexity theory.

Moreover, some analysts foresaw the potential arising from computer advancements even since the late 1970s. For instance, in one case it was proposed that a "strategic intelligence system" (SIS) be created to allow top decision makers an easier overview on military and political intelligence operations and their anticipated impact. Said system was designed to include the identification of strategic issues of interest, collect the data necessary, integrate the information obtained and provide an intelligence report in the final stage.

These concepts were welcomed by the intelligence community, however, often ignored due to the difficulties posed by the accurate and objective assessment of qualitative factors for the political and social intelligence components, which was essential since the purpose of the intelligence process itself was to transfer "meaning" from the field to the strategist in charge.

A sociocybernetic perspective solves the dilemma as the philosophy behind it was specifically designed as support for social sciences research. Additionally, currently, this scientific approach is often found used in analysing social networks and connections between actors. If one understands that both state and non-state actors relevant for strategy-making are mirroring similar rational and irrational behaviors of the people in charge of them, we can extend the same principles in analysing, for instance, the long-term goal of the hybrid political, social and economic aggressive operations engaged by our neighbours. Similarly, influence networks formed on the international political scene are not much more different than the ones formed by individuals if we do not take into account the stakes of the game but focus on identifying patterns of behaviour and possible objectives.

In addition, as other proposed frameworks suggest using Key External Intelligence and Internal Key Performance Indicators for an integrated measurement of all relevant data, these instruments would identify any discrepancies in the qualitative data assessment and allow the analyst to recalibrate and make the adequate adjustments.

By shifting the perspective to an interdisciplinary, integrated approach, one can link apparently disparate events more easily and gain valuable insight into the opponent's strategic goals in a shorter time-span. This aspect is particularly relevant in the age of asymmetric warfare, in which hybrid, multi-layered tactics are employed in select regions, often targeting the weakening of society's cohesion and stability. One cannot counter a problem it does not see until its effects are already being seen in select social groups, regional development or general distrust into public institutions. Therefore, decreasing response time is crucial in the age of high-speed internet, in which any information can be disseminated with malicious intent in a matter of seconds.

Preventing the erosion of democratic values and mechanisms can be done by adapting our strategic thinking to the new realities on the field, which is achievable by using all the instruments we have available to monitor any potential threat.

Taking this idea further, considering that recent trends in intelligence analysis are mostly focused on improving data collection abilities and the quantification of all relevant aspects that determine an actor's behaviour, we can safely rationalize that a system designed specifically for strategic intelligence will be brought back on the table sooner or later.

Additionally, the private sector is already paving the way for this initiative, as several flagship projects emerged in recent years which can serve as stepping stone for a more complex system used at state level.

For instance, Eurasia Group pioneered egX, a platform which automates the monitoring and collection of geopolitical risk-relevant data. Through such a platform

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cannot replace the human interpretation element for a complete analysis, it can significantly decrease the overall time the analyst needs to deliver the final product to the decisionmakers, by managing a large part of the data stream.

### **4. Conclusion**

To sum up the present paper, strategic intelligence is the key element to ensure long-term state security and stability.

As the Information Age and its technological instruments bring forward a constantly changing set of new threats, and geopolitical alliances are reconfiguring and shifting the global balance of power in response, rethinking strategic analysis in a standardized, systemized manner is an imperative.

The most adequate response to analysts' needs to adapt to an increasingly interconnected world and its corresponding streams of data, is to reframe the general analytical parameters so that they start from a wholistic approach, that aims to integrate all processes undergoing simultaneously on different layers.

Sociocybernetics, with its core ideas, could provide analysts with a fresh insight into the social processes mechanism and facilitate a better understanding of the changes the latter is going through, while simultaneously creating a framework to facilitate the accurate quantification and assessment of qualitative elements crucial for the well-being of a state.

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