### INTELLIGENCE IN SOCIETY: SPARKS OF A SYSTEMIC APPROACH

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#### Abstract:

The article addresses the potential role of intelligence structures in social change, aiming to support the economy of effort as a prerequisite for maximizing societal efficiency. Western democracies, with their openness to dialogue, provides the supporting arguments. The theme and its objective, respond to specific concerns of the policy-making forums, serving active social forces. The evolution of society is addressed through economics, considering market mechanisms in the pursuit of exchanges, with socio-human energy expenditures and harvesting. The approach is multimethodological, based on an economic interpretation of the theory of social systems, supported by heuristics and casuistic. The enterprise is based on the analytical reflection of socio-human behaviour, consisting of capital-forming assets. The intelligence activities are central to the system. Surveillance and information collection activities are oriented towards the concentrations of social capital and power. The progression (information analysis, intelligence cooperation) of the evolution of society (identity change) arises from the responsibility of intelligence towards society and diverse opportunities (the power of knowledge, policy-driven evolution). The results are varied and differentiated: from concepts (counter-reaction), a systems theory adapted to the real world, methodological elements to orient information analysis, and substantiated suggestions useful for the development of public policies, to foreshadowed identity options. Building better at home remains a matter of major concern due to traditions that favour reforms, to the detriment of an adaptation system.

**Keywords:** society, systems, human energy, power, intelligence.

### Introduction

The article addresses the potential role of intelligence structures in social change, aiming to support the economy of effort as a

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prerequisite for maximizing societal efficiency. In particular, the paper aims to: contribute to improving the perceptions and transparency with regard to the role that intelligence can play in supporting the evolution of society; suggest a comprehensive framework for the analysis of information. In addition, the work draws attention to the perils of domestic politics.

The topic of the paper and its objectives, respond to specific concerns of the policy-making forums, serving political and other active social forces. The evolution of society is addressed through economics, considering market mechanisms in the pursuit of exchanges, with sociohuman energy expenditures and harvesting. The approach is plurimethodological, based on an economic interpretation of the social systems theory, supported by heuristics and casuistic. Simplification, necessary to reduce uncertainty, is complemented by *complexification*, to focus the analysis and to allow for the simultaneous treatment of several topics of interest. Western democracies, with their openness to dialogue, provide the supporting arguments.

The analysis calls for the wisdom of universal and specialized literature and capitalizes on history lessons, drawn from developments of hundreds of years and global coverage, or newer ones, with regional relevance.

The paper selects and treats various elements:

- i) basic theories and concepts, for the development of a framework, adapted to the real world;
- ii) practical support for the reflection of the social system (social energy, principles, and social dimensions), and of its functioning (economy, assets, capital);
- iii) objectives and means (societal efficiency, power, politics and democracy);
- iv) progression (information analysis, intelligence cooperation) of the evolution of society (identity change), responsibility of intelligence towards society, and diverse opportunities (power of knowledge, policy-driven evolution).

The results acquired vary and differentiate in terms of accuracy and applicability: from well-outlined notions, such as concepts,

patterns, tendencies and rational public policy suggestions, to foreshadowed identity development options.

The paper considers two specific elements, with differentiated roles and priorities, which produce distinct, complementary results, in accordance with the specific objectives. The analysis is organised accordingly, in two main parts.

- a) The first one *A systemic understanding of intelligence in society* is a methodological work oriented towards creating a framework for analyses, with clear concepts, principles and theories. Amongst the results there are *a systems theory adapted to the real world*, a social system with energies and powers, integrated into a system of systems, and suggestions regarding the understanding of intelligence.
- b) The second part *guiding a systemic approach of intelligence in society* illustrates the use of previously developed framework. It reveals the potential role and contributions of intelligence in tackling society's economy of effort. The main results consist of a concept (counter-reaction); practical steps to orient information analysis towards power centres, according to needed skills and the fields of observation dimensions and subsystems; reasons for the intelligence forces to join efforts; reasonable arguments for the involvement of intelligence agencies in changing the identity of society and their potential role.

A modified version of the theory of social systems (Oneaṣcă, 2018) eliminates the previous shortcomings; it considers the energy and associated principles, respectively the minimum action, self-organization and economy of effort, as elements of continuity of an all-encompassing system. The main functional social dimensions – politics, economy, and justice – house the greatest systemic opportunities and threats, nationally and internationally. Intelligence agencies have a say in this. Society entrusts them with most of its information. In turn, intelligence agencies are obliged to harness their powers and serve society, supporting its policy-driven evolution.

In conclusion, the analyses and the recommendations support and reinforce the self-organization of society. The article suggests solutions to improve the analysis of information and ways to support systemic modelling of socio-human behaviour and increase the efficiency of society. The intelligence activities are essential.

## A systemic understanding of intelligence in society

The adoption of constitutions throughout the 19th century (CCP, 2014), laid the foundations for the accountability of rulers. The protection of sovereigns and those in the leadership of the states has gradually diminished, though it has never been abandoned for good. Privileges have been cloaked in obscure forms (e.g., immunity, exemptions, special treatment), as politicians are the first to benefit from their law-making powers. Nonetheless, the advance of government has accelerated. Institutions have developed, specialized, and strengthened. The process continues nowadays, stimulated, amongst others, by the progress of technology, facilitating an exponential growth of data production.

Processed data (information) provide the means to effectively support the exercise of authority and contribute to the rapid change of the world. Significant changes in methods and means of collecting information created "a demand for new approaches to analysis and intelligence" (UNODC, 2011). On such a basis, the international cooperation of intelligence agencies has increased (FIORC, 2017; Legrand, 2020).

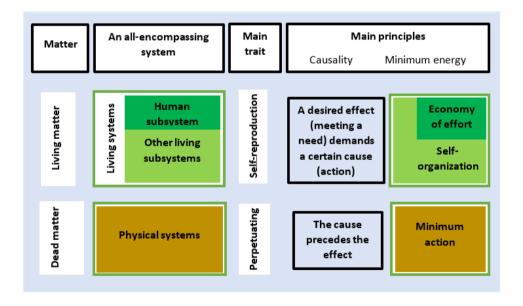
The activity has taken on worrying proportions for some. Information about the collection of data, their nature and mass, slipped to the press (Bauman, 2014). Political personalities, justice systems, and civil societies, have reacted and expressed legitimate concerns regarding the preservation of freedoms and liberties (Allard, 2014; Bauman, 2014). On the positive side, intensified international competition rewards states that achieve their goals (e.g., World Bank, 2021). Their ranking process seems to work in favour of better-informed and organized states (UNDP and MBRF, 2020). Accordingly, intelligence has to adjust. The place of intelligence in society, of their agencies and enlarged networks, needs reassessing. The societal understanding of intelligence activities is prefigured by clarifications, firstly about a systems theory adapted to the real world, secondly, about social systems, their energies and powers, and thirdly, about

ways of perceiving intelligence in society. The first two bring to light elements of a coherent methodology and its practical framework, whereas the third introduces the understanding of intelligence activities and their specificity.

A systems' theory adapted to the real world. Systems theory is a theoretical assessment, widespread in the literature, which provides frameworks for comprehensive examinations of various fields; these include society, its components, interactions, and processes. Different models and variants of the systems theory co-exist. Their perspective is multifaceted, rooted in sciences and disciplines (e.g., natural, social), their subdivisions (management, engineering, and design) or, in specific uses and functions (service systems; viable systems; smart systems; reticular systems). Accordingly, there is an abundant stream of research targeting systems theory, and focusing on their origins, definitions and basic concepts, or complex approaches (Laslo and Krippner, 1998; Mele et al., 2010; Stichweh, 2011; Carayannis et al., 2016).

The main advances of the theory date back to the middle of the twentieth century. Firstly, the distinction between system and environment replaced the distinction between whole and part (Bertalanffy, 1956). Differentiation facilitates the approach of the system in its state of integration in the real world, and not as an isolated construction. Secondly, a general theory of self-referential systems, which use own outputs as inputs, redefined the distinction between system, and its environment (Foerster, 1960). It is a major step explaining perpetuity of matter, perennity of life, and their interconnectivity. As result, a meaningful definition of a system refers to a functional group of elements. Functionality assumes a purpose to which the interactions between elements contribute. Therefore, any systemic perspective has a 'system', with parts or structures, as the unit of analysis (Parsons, 1965). The structure of a system is multi-level, organised hierarchically. The supra-systems are ordered according to their influence on the system, whereas the subsystems are just parts that contribute to the system's finality (Barile, 2006, 2008).

The theory should work if applied to a comprehensive and consistent chain of systems. Such a system of systems is the universe, as it provides a natural anchoring point for the approach: any other system may have a supra-system. Thus, the universe forms an allencompassing system. It comprises everything and everyone. Specific to the universe is its continuous, uninterrupted motion. Motion equals energy. Therefore, energy is the fulcrum of the universe. It accompanies and conditions all processes and provides the required consistency to the systems. Energy cannot be created or destroyed; the law of conservation of energy states it. However, energy can be harvested, expended, or converted into a different form, until it becomes unavailable (Georgescu-Roegen, 1975). The energy, deeply rooted in matter, constitutes the element of continuity for the entire chain of subsystems. Figure 1 portrays the main systems and their corresponding traits and principles.



**Figure 1:** An all-encompassing system (*Source*: the author)

The emergence of living matter comes with the manifestation of a new form of energy, which is subject to specific laws. Living matter structures living systems. Components of living systems bring free will and its arbitrariness into the material world. The genetic programming of living matter compels communities of individuals and their societies to reproduce. Those who fail to meet such a fundamental requirement, perish.

The principle of minimum action (Maupertuis), governing physical systems, acquires the expression of self-organization (Thelen and Smith, 2006, p. 259; Mathiesen et al., 2011) in living systems. It is the foundation of a new source of legitimacy that involves multiple, reciprocal interactions, exercised at all levels. Instructions of internal (genetic programming) or environmental origin, manage the interactions of individuals and communities (Thelen & Smith, 2006, p. 259).

The evolution of living matter culminates with the emergence of humans. They are endowed with behavioural rationality and possess a certain control over instincts. Thus, people can guide their evolution. A higher form of brain energy feeds their actions and fuels the change. It is what differentiates humans and their societies from other living systems.

Social systems, their energies and powers. The best-known systems theory of society is the social systems one (Luhmann, 1995). It sits on three pillars: systems theory, social evolution theory, and social differentiation theory (Albert, 2016). The social system, as conceived by Luhmann, reduces the complexity and provides a framework for analysis. The social system is a functional construction of components with prescribed limits and environments, characterized by several elements (Luhmann, 1995, p. 15, 17): the system excludes itself from the environment; the environment has no self-reflection or ability to act; the environment is delimited by an open horizon, not by borders that can be crossed.

A two-person subsystem is the simplest social system, as one person cannot meet the condition of being social. Such a social subsystem is included in another subsystem, to ensure broad reproduction. The higher the aggregation, the greater the stability, which no longer depends on the composition or reproduction of a particular subsystem.

The main criticism of the theory of social systems is the lack of a principle or a natural anchor point (Knodt, 1995). This is overcome by considering the universe, as an all-encompassing system, and energy with its principles, as elements of continuity.

Society bases its existence on social relations. These give rise to rules. Social organization structures the existence of communities into activities or areas of existential concern. They form social dimensions, functional (economy, politics, justice), or just existential (less structured, i.e. outlined by human needs). Social dimensions are subsystems in a social system. The more developed they get, the more isolated they become from each other, as a guarantee of their reproduction.

Social systems rely on their capacity for self-reproduction. The perenniality of life involves the harvesting and spending of human energy. Human energy supports i) physical mobility and autonomy; ii) thinking, reasoning, and solving problems; iii) enthusiasm, determination and endurance; iv) the primitive impulse to procreate. It mainly comes from food and is transferred and transformed into various forms necessary for the functioning of individuals and society (WHO, FAO, and UNU, 2004).

Interactions in communities, within and between groups, lead to socialization of energy: individual, human energy becomes social or group energy. Within an all-encompassing system, the energy transferred or converted in the unit of time is power. In social systems, the power expresses the ability of groups and individuals to make others to act in their interest (World Bank, 2017, p. 3).

Human power stems from the innate or acquired capability to mobilize socio-human energy. Communities generate a different kind of power, of social nature. Social power is concentrated hierarchically, multi-level, following the system's structures and activities. Each hierarchy describes a specific power. Among these, the powers generated by the functional dimensions (e.g., political, economic, legal) are the most developed; they cover the entire society. Therefore, power provides a criterion for ranking the quality of energy; it can amplify the effects of its spending, harvesting, or investing.

Each dimension of society has its own markets (e.g., political, economic, and legal). They facilitate the birth and exchange of specific assets and capital (economic, political, and cultural). Culturally, the recurrent exercise of harvesting and spending energy improves traits and substantiates capabilities. Economically, the efforts materialize in goods and services. All these, capabilities, traits, and goods and services represent assets (IAS), which create capital. Assets and capital and can be private, collective, or national and supranational, according to possession. Their expression may use monetary units, or not, depending on whether they emerge on economic or non-economic markets.

Social capital is an aggregation of resources related to a sustainable network of relationships, knowledge, and mutual recognition (Oneașcă, 2018). Belonging to a group provides each of its members with the support of community-owned (social) capital. The "prerogative" entitles them to credit, in the various senses of the word (Bourdieu, 1986). The existence of hierarchies in the group allows some to benefit more than others, i.e. to approach their share of social capital in various measures.

Much like the social dimensions, the forms of capital are interconnected. For example, cultural capital (scientific or technical) conditions the use of economic capital (e.g. tools).

Capital is energy, embodied or objectified (in the language of Bourdieu, 1986); accordingly, the holders of capital have power. They use it to meet individual or collective needs and desires. The choices that consumers make when purchasing goods and services, as well as when making decisions related to education, work, or politics, all express exercises of power. These become greater with the capital that generated them. Political power, which arises from the collective capital of society as a whole, is the greatest of all. It socializes based on interpersonal relationships and, through them, amplifies, exceeding the sum of the powers of individuals.

**Intelligence and its understanding.** Intelligence has various meanings and understandings, according to the framework considered:
i) real world, portraying the way it is performed (intelligence

providers); ii) legal, based on applicable rules (constitutional foundation and related legislation); iii) academia and society in general, consider perceptions, ideals or desires.

Intelligence activity, like any purposive activity, has a clear criterion of truth, with a technical part, which says whether it works or not, and an economic one, regarding costs, affordable or not. The real worldview of it is implicit and informal, as it relates to applicable expertise. Its understanding, scientific support, or even legitimacy, barely matters; securing the results, or having the job done, is of overriding importance.

The Intelligence Community presents its mission in a formal way, based on understanding the rules. The main activities are "to collect, analyse, and deliver foreign intelligence and counterintelligence information to America's leaders". Based on these "they can make sound decisions to protect" the country. Manuals for analysts (UNODC, 2011) present the intelligence cycle, at both operational and strategic levels (tasking, collection, evaluation of source and data, collation, analysis, inference development, and dissemination).

The legal understanding of intelligence varies depending on the applicable rules. These are specific to diverse institutions and dominant cultures. The wide world has many examples; the more transparent ones are those in advanced democracies. In the US, intelligence is organised as a community. It has collective structures, such as the National Security Council, and Homeland Security Council, coordination ones (Office of the DNI) and a diversity of specialised components (see US PUBLIC LAW 108–458, 2004; CRS, 2020), covering the development and conduct of foreign, defence, and economic policies, and the protection of United States national interests. Operations safeguard many activity sectors, amongst which military, economic, medical, and geospatial ones. They all consider a main group of activities, amongst which, i) surveillance and collection of data, ii) analysis, and iii) dissemination.

In general, like many formal rules governing public life, a legal understanding is inertial and lags behind events, either due to technological advances or due to rapidly evolving needs, capabilities, and expectations in society (see UNCTAD, 2020). Decision-making and

regulation take time. In this respect, it is worth mentioning that the initiation of the reform of American intelligence services took a decade, formidable events and several commissions (e.g., CRCUSIC, 1996; US PUBLIC LAW 108–458, 2004).

Society's understanding of intelligence is, by far, the least clear. A supportive environment requires high social development, strong civic attitudes and adaptable institutions. It is in such refined conditions that problems of control and accountability arise. Although the secret that accompanies intelligence activities casts them under a veil, trust in perceptions. institutions continues to influence As understanding of intelligence relates to its impact with the world (Kerke and Hijzen, 2021), the way it communicates to the public (Petersen, 2019), and its changing practices (Petersen and Rønn, 2019). Amongst the core-functions of intelligence, there are (Breakspear, 2013): i) foresight and insight, intended ii) to identify impending change (opportunity and threat).

### Guiding a systemic approach of intelligence in society

The evolution of the living world exposes its constitutive diversity. This implies the existence of many life forms and the differentiation of their individuals, ensuring the perenniality of life and species. Differentiation is natural and translates into a wide-range of inequalities.

In society, inequality arises from the variation of natural endowment (biological: physical and intellectual; social: status, class; cultural: traditions) and develops by discriminating access to resources (e.g., funding, education and training, employment), while equality is a perpetual social desideratum (Oneașcă, 2018). Combating inequality has limited success in any society. This is due to insufficient resources and flawed public policies in addressing work, education and health, housing, and social integration. Worldwide policies are even poorer in this respect. As a result, inequality of individuals is passed on to communities and societies, escalating their division and that of the whole world.

Historically, equality has been restored downwards. Wars, plagues, natural disasters and economic crises have played a major role

(Piketty, 2014), as has population growth (Malthus, 1798). In our days, peace and control of plagues give way to growing inequality. It generates threats and opportunities in terms of security, defence, and the fight against crime, making intelligence activities indispensable.

Reproduction of inequality, both within and between societies, is a major concern. Over the next decade, inequality is expected to explode (NIC, 2012), threatening the social contract in many countries (UN, DESA 2020). In this context, it is no coincidence that the livelihoods of families are redefining the measure of expanding prosperity and economic opportunities as a priority for national security (White House, 2021). More than that, inequality fuels crime and corruption, which generate human and material losses and reduce, in turn, the chances of progress and the disruption of alienation cycles. Thus, the productive potential diminishes. Social energy is not fully valorised, and society's progress is confined. Growing competition and rivalry in the international arena reward efficient societies. Accordingly, distribution of power across the world is changing. Intelligence has a role to play. The systemic approach to intelligence is driven by suggestions on information analysis, the economy of effort, intelligence and identity of society.

**Information analysis.** Information is essential in reflecting reality. It results from energy exchanges, has value for knowledge, and is, therefore, a capital-forming asset. The information holder has power. The more information there is, the greater the power. Intelligence agencies control access to many sources of information worldwide; useful information makes them very powerful.

Advanced societies are knowledge-based. Their economic, social, and political performances rely on the development of data, information, and knowledge. International institutions, think tanks, and academia constantly emphasize the importance of knowledge and innovation (see UNDP and MBRF, 2020; World Bank, 2021).

In line with the above, a sound analysis of a system requires several elements (Foerster, 1979, p. 8; Easton, 1965a, p. 23-25; 1965b, p. 15-16).

1) A "system" to be observed (e.g., economic, political, legal);

- 2) An observing or a reference system, which constitutes the "environment", the one in which the system is embedded;
- 3) A "response" or variations in the composition and functioning of the observed system, occurring as effect exerted by external and internal factors of change; and
- 4) "Feedback", as information-based corrections, initiated by the system's decision-making.

Thus conceived the analysis, the observer implicitly assumes a low path of ambition and a passive goal; it preserves the system, regardless of the achievement of its functionality. Therefore, another important element that may respond to the need for a system change, is required; it is termed (5) "counter-reaction" (Oneașcă, 2018), and understood as an impulse of energy, which initiates qualitative leaps and drive compulsory increases. The counter-reactions result from decisions that involve a transformation of existing "contracts" between individuals and their social constructions. They differ from normal responses, which are in line with the system and its routines. A profound change of the system may occur abruptly, in the absence of a gradual evolution of the system (quantitative accumulation). The necessary accumulations follow nevertheless, at a pace appropriate to the more or less favourable circumstances.

A systemic approach of societies allows for comprehensive and systematic analyses, needed to increase the prospects of progress. Such an approach should consider various perspectives.

- One is facing researchers and their skills, embracing international standards, such as, i) research and development ones (e.g., FORD in OECD, 2015), ii) education disciplines (e.g., ISCED-F, in UNESCO-UIS, 2014); these standards make up the social sciences and respectively, the social disciplines, which theorize and approximate knowledge about society.
- A more complex one is oriented towards the fields of observation and the ways they are defined: iii) social dimensions, structured or functional and less structured; iv) societies' administration and the exercise of power and related activities (e.g., global, regional, central and local

institutional structures); v) national accounts, or vi) any specific assembling.

• Finally, any combination of the above can be used.

Methodologically, the analysis of observation fields can have different angles.

- A longitudinal one groups constructed dimensions:
  - functional ones, e.g., economics, politics, justice (Luhmann, 1995);
  - governance of society, e.g., sectors, industries and groups of activities (see the organization of governance or statistics of OECD, EU, UN, at national or sub-state level);
  - the specifics of change measures, e.g., public policies, on different levels of responsibility, such as economic, employment, education and training, health, environment, public order, crime, defence, justice.
- A transversal one aims at the existential (basic human needs) or constitutive (culture) approach of society:
  - human needs systems,
  - public policy systems, and
  - the culture.
- A particular angle can be defined according to certain needs, aiming at interactions delimited in space and time (ad-hoc constituted).

Processing massive amounts of data, available from electronic communications (e.g., satellite, internet, underwater cables, and terrestrial networks), activities databases (public and private), and archives becomes a challenge. In the background is running a "revolution in technology that poses both peril and promise" (White House, 2021). Emerging technologies, such as artificial intelligence (AI) and quantum computing, "could shape everything" in our lifetimes.

Cooperation of the intelligence structures, whether national, regional or international, paves the way for securing the means in assembling, evaluating and analysing ever-increasing data flows. Therefore, the intensified cooperation of the Western intelligence and of non-state actors seems to follow the path of natural evolution

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(self-organisation). Historical trends provide arguments that support the assertion: i) the collapse of hierarchical systems, such as the empires, ii) globalisation, as an increasing integration and interdependence of societies.

The economy of effort. Social energy, accumulated at the level of the system, produces the strongest capital and associated power. Consequently, its uses (social embodiments) originate the greatest possible loss or economy of effort.

The collection and analysis of information spawned by the main sources of power in society are of utmost importance. Therefore, resource allocation priorities need to be developed, and appropriate procedures prepared for possible outcomes. A systemic perspective of the power sources, based on the Ford classification of social sciences is foreshadowed in Figure 2.

The focus on power sources benefits from systems, theories and elements of codification. The representation serves to guide analysis to the power centres, capitalizing on the previous methodology. Of great interest are the amount of capital accumulation and its growth rate.

Social science	Power system / theory	Element of codification (operator)
Sociology	<b>Social systems</b> (Luhmann, 1995)	Communication
Economics	Social models (Oneașcă, 2018)	Market / exchange
Psychology	Psychic systems	Thought / consciousness
Politics	Political systems	Will / decision
Law	Legal systems	Rule

**Figure 2:** A Socio-human energy approach of power centres (*Source*: the author, based on analyses and data on social systems)

**Society works based on communications.** Their surveillance comes naturally: all threats, conspiracies and criminal acts require communications, as do opportunities to strengthen security. Therefore, communications have the potential to expose the social capital that grows hostile to the social order, as well as the intentions of influencers.

Public and private data flows of activity records and their archives complement the communications and facilitate the understanding of reality and the forecasting of its evolution. The power centres approach illustrates a comprehensive perspective on subsystems, theories, and ways of systematic analysis of society so that no opportunity or threat can be overlooked. It takes advantage of the overlap of theory with the reality of functional dimensions. The main pillars of the constitutional checks and balances in society are also covered: legislature through politics, judiciary through law, whereas the executive is governance – at the intersection of social sciences – defined as the process by which state and non-state actors interact to design and implement policies in a context of rules (WB, 2017, p. 3).

The economy provides the necessary resource flows for all other dimensions to self-reproduce. It postulates free access to everyone and conditions material existence. Therefore, it is the biggest concern for all livelihoods. The monetisation of society works in favour of the economy. What does not cost has no value. On such a basis, businesses are conducted. In reality, money is just an approximation of the sociohuman effort. A very large part of it is unaccounted for; for instance, unpaid household service work was more than 63% of GDP in UK in 2016 (ONS, 2018).

Besides the longitudinal economic power system, a transversal phenomenon that requires a special attention is the entrepreneurship. It is a major component of any spectacular leaps in economic development (Kirzner, 2009); it expresses a capacity for initiative, exercised by individuals, groups, social constructions, or authorities. Market presence of the entrepreneur has been recognised in all social dimension, not only in the economy but also in politics, culture, education, health, etc. (S)he takes advantage of market opportunities and the distribution of assets, for personal benefit, increasing her/his assets.

Politics is the primary dimension in social systems (Luhmann, 1995). The evolution of society demonstrates its essential role and its ability to transform any other dimension. The main functions of politics are (see Buchanan, 1987; Luhmann, 2000): i) production of binding collective decisions; ii) creating the rules of the game; iii) power generation and allocation.

Traditionally, domestic politics is not a target for intelligence. However, the strategic priorities and actions of politicians have raised democratic concerns (NIC, 2021; Leyen, 2019; Petersen, 2019). In addition, actions by Western leaders have provided sufficient reasons to consider law enforcement in politics (see BCJ, 2017; USDJ, 2019). No one should be considered above the law.

Democracy allows competition and diversity of opinions. The rule of society by the many, in democracy, prevents the abuses of the few. However, power sharing divides the social energy and fragments the long-term evolution of society. Thus, democracy promotes a compromise between the freedom that people cannot do without and the costs of dividing society and of its sinuous course. Essentially, democracy continues to exploit the lack of a system to protect people against their own choices (Oneașcă, 2018). Intelligence can contribute to changing it.

In a democracy, more than in authoritarian regimes, sovereignty belongs to the people. Decision-makers work for the benefit of the people. Only in this capacity, do they have access to intelligence reports and possibly act accordingly. However, poor or imperfect rules and institutions, allow authoritarian regimes to intervene in democratic societies; social networks and exchanges provide the ways (EP, 2021; NIC, 2021). "(T)he four cornerstones of Western democracy – state restraint, pluralism, free media and economic openness – provide openings for hostile external actors to interfere in democratic society through a host of covert, non-military means calibrated to undermine their internal cohesion and accelerate political polarization" (Wigell, 2021). Hostile external actors intervene in elections and choose their future opponents; for them it is more direct and efficient – saving time and effort – than to face the results of free elections afterwards.

The main rules and institutions securing social order in society are occasionally tested and their weaknesses are revealed. The Covid-19 pandemic has come as an unexpected burst of needs and urgencies. The outbreak has exposed not only deficiencies of the health care systems (their readiness and capacity to face pandemics), but also the inertia of major political institutions in developed countries. The reaction of Israeli decision-makers seems an exception; it has emerged quickly, under siege. The authorities have assigned the intelligence agencies the mission of securing medical supplies and instruments, in short supply on the international market. The Israeli intelligence providers have acted swiftly, as a rapid intervention team, responding to the task (Kahana, 2021; Eiran, 2020). The case suggests lessons for other countries. Rapid reactions and the availability of a team for intervention are included.

Most countries have little or no reason to consider national security as part of their identity. However, the need for an operational capacity ready to intervene in the event of a national emergency hampered by global competition conditions must be taken into account. The development of such capabilities is of a *counter-reaction* nature as it acts in the direction of improving the system. It also saves time and effort.

The intelligence and identity of society. Social order lies in both inherited and acquired capabilities. The former is rooted in human biological programming, environment, and social traditions (beliefs, values). The latter is generated by structured interactions and rules, formal and informal ones. Humans and their societies have developed a capacity to drive their evolution, purposely. They do that with growing determination and ever-increasing efficiency. Their self-centred and conflicting goals are fast approaching, weakening innate programming and self-organisation. Consequently, social subsystems can succeed or fail in their reproduction. To date, the most developed societies face a high risk of under-reproduction (UN, DESA, 2019). Isn't that an identity trait worth changing? There are much more, some hidden.

Intelligence production needs to consider the persistence of a way of life, based on old, deep-seated principles and attitudes.

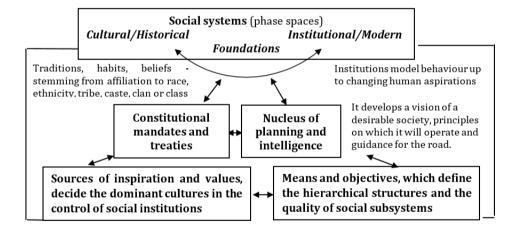
Accordingly, common visions of identity (Anglo-Saxon) and interests of developed countries have established the Five Eyes alliance (FIORC, 2017). Success, based on collective capacity and almost forty diverse public policy networks, has shifted trans-governmental goals from inward looking to global governance (Legrand, 2019; 2020). However, institutions and identities are not easily transferable. They "privilege the 'constitutive' characteristics of knowledge, identities and norms that define" their own identity (Wendt, 1992). Recognition of the need for change must be accompanied by consideration of new avenues of progress, as well as ways of implementing them in society. Intelligence activities should focus on the main avenues.

Firstly, the problems of control and accountability generated by increased public-private interactions are likely to lead Western intelligence beyond rule-regulation behaviour. In such cases, capacities for critical judgment become relevant (Petersen and Tjalve, 2018). Manifestations of politicisation of intelligence, in the US (Gentry, 2020) and Australia (McPhee, 2020), show that the clarity of intensions makes the difference. The control, accountability and law enforcement should counteract the disregard of applicable norms, orienting the actions in pursuit of the legitimate interest of the people.

Secondly, the principle of Le Chatelier warns that a system tends to counteract external control attempts (Helbing, 2010, p. 9). Therefore, supporting and strengthening self-organization and self-control through mechanism design (Helbing, D., 2010, p. 10), is the right way to shape the social system through human will; it is also in line with the economy of effort principle. Consequently, institutions should be conceived in such a way as to act following the objectives, expectations and actions of society, which define its ideology. Producers and consumers of information need to share this task.

Thirdly, technology has a dynamising role. "The uptake of architectural principles of *security-by-design* and privacy-by-design in digital technologies" (EC, 2021), paves the way to address the digital future of society. Intelligence must be at the forefront of technological progress, both for strategic purposes (e.g., security and defence) and tactical ones (e.g., data protection, collection and analysis). Advanced countries have regulated this (e.g., White House, 2019).

Information and technology are at the forefront of the new gold standard of society's currency; it is immaterial and without nationality. Market-led forces have created crypto currencies. They hide wealth and its sources. The combination of information, technology, and mechanism design places the evolution of society on solid foundations and all-encompassing considerations; they include what previously could not be suspected to exist. It is the ultimate platform for building a knowledge society. The absence of market forces hampers the promotion of such a strong combination. Society must endure the consequences of its social development until it can ensure that its citizens behave in accordance with self-imposed rules. Changing the rules of the game is the way to go. How could intelligence activities support society's change?



**Figure 3:** Place of intelligence in identity modelling – Multiple stable attractors

(Source: the author, based on analyses and data on social systems)

Society follows a certain trajectory in its evolution. The predominance of some or other of the influencing factors decides the path. The range of mutations of a social system consists of sets of characteristics or properties towards which the dynamic system tends to evolve. These are called attractors. Groups of attractors define

possible stable states of the system. These, in turn, form multiple system identities or multiple stable attractors (Martin-Breen and Anderies, 2011, p. 15). The identities of the system are part of the set of representations of possible states, called phase spaces. Figure 3 suggests the place of intelligence in identity modelling. Constitutional mandates and treaties provide sources of inspiration and values, pending the definitions of their structures and quality.

Identity modelling involves multidisciplinary and interinstitutional teams that include intelligence expertise. The combined efforts leverage the flows of information (communications, actions, rules, and thoughts) and archives to identify specifics, trends, patterns, and systemic flaws that slow down evolution. In implementing the agencies' initiatives and responsibilities, their intelligence objectives come first (e.g., security and counter-terrorism measures). The more complex enterprises are likely to need preparatory frameworks for cooperation actions inside and across borders. Thus, the need for change and its path are better informed and the decisions prepared.

#### Discussion and conclusions

The theme is extremely wide to allow for one strong conclusion. There are however several things to mention. Social change in accordance with the principle of the economy of effort sets a high path of ambition. In addition, suggestions for a novel methodology and its use support change. The framework conceived for the analyses of information is robust. The system of systems is universal and can include any real or projected subsystem. Consideration of international standards (social sciences and disciplines, assets) strengthens the way to a comprehensive approach of society. It includes all available data and archives), knowledge information and (flows regarding communications (sociology), actions (economics), decisions (politics), rules (law) and thoughts (psychology). The economic filter to analyse and reflect society is a powerful tool to use. It is not new. However, a unidisciplinary perspective has never been tried. The energy acts as a continuity element of a constitutive nature. It creates conditions to address efficiency in terms of socio-human effort. Therefore, all efforts can be accounted for, monetized or not.

The information available is substantial and ever growing. Orientation of the surveillance and information collection activities towards the concentrations of social capital and power, inside and across borders, saves time and efforts. Better information supports better analysis. Information processing, analysis and capitalization are expensive. Therefore, the cooperation of the intelligence forces in democracies seems imperative. The economy of effort would be significant worldwide. The conditions are favourable; regional and national intelligence strategies share common objectives (e.g., rule of livelihoods. technology) democracy. law. and concerns (authoritarianism, cybercrime, counter-terrorism).

Most of the systemic opportunities and threats faced by intelligence activities are found in the functional dimensions (politics, economics and justice), at national and international level. The larger the social capital, the more reserves it has to improve the efficiency of society. Politics forms the largest of social capitals. It determines the proper functioning of the social system. Politically established rules (decisions and policies) shape society. They reflect energy expenditures of an investment nature; their recursive results accumulate without the need for new expenses. This is a strong reason for intelligence activities to inform them and corroborate them as best they can. In essence, policies must be designed, adopted and implemented for the benefit of the people, not the decision-makers. When in doubt, communication helps.

To date, intelligence activities have a long-established place. In democracy, they serve the national interest and various consumers, support security and defence, avert crime and threat, or, more generally, provide assistance in addressing vulnerabilities and strengthening the social order and its prospects, according to opportunities. However, democracy does not make things easier for intelligence activities; on the contrary, the persistence of varied interests (economic, political) invites authoritarian regimes to exploit the division of society (power and opposition).

Intelligence agencies are very strong players. Societies trust them to access most of the information available. Consequently, they are obliged to harness their powers and serve society, supporting its policy-driven evolution. Still, a strong impetus is necessary. It would save time and effort if NATO or global governance structures generated it and not urgent needs such as cybercrime, terrorism and pandemic. These are driving countries closer together. Improved rules of cooperation are necessary, accommodating the various cultures. The politics remains indebted.

Deficiencies or even inadequacies of political systems are treated the same, globally: as a constituent part of society, not as a constructed one. Traditions frozen in time favour a long series of reforms, to the detriment of an adaptation system. This remains a matter of major concern. Building better at home is at risk.

#### **References:**

- 1. Albert, M. (2016). *Luhmann and Systems Theory, Oxford Research Encyclopaedia of Politics*, DOI: 10.1093/acrefore/9780190228637.013.7
- 2. Allard, Tom. (2014). "Australia ordered to cease spying on East Timor by International Court of Justice". *The Sydney Morning Herald*. Archived, on line at https://www.smh.com.au/politics/federal/australia-ordered-to-cease-spying-on-east-timor-by-international-court-of-justice-20140304-hvfya.html
- 3. Barile, Sergio. (eds.) (2006). *L'impresa come sistema. Contributi sull'Approccio Sistemico Vitale* (ASV), I ed. Torino: Giappichelli.
- 4. Barile, Sergio. (eds.) (2008). *L'impresa come sistema Contributi sull'Approccio Sistemico Vitale* (ASV), II ed. Torino: Giappichelli.
- 5. Bauman, Zygmunt, Bigo, Didier, Esteves, Paulo, Guild, Elspeth, Jabri, Vivienne, Lyon, David, Walker, R. B. J. (2014). *After Snowden: Rethinking the Impact of Surveillance. International Political Sociology* (2014) 8, 121–144, doi: 10.1111/jps.12048
- 6. Bertalanffy von, Ludwig. (1956). "General System Theory," in General Systems: Yearbook of the Society for the Advancement of General Systems Theory, The Society, online at https://books.google.ro/books?id=rw0DAAAAIAAJ
- 7. Breakspear, Alan. (2013). "A New Definition of Intelligence", in *Intelligence and National Security*, vol. 28/5, p. 678-693, Routledge, DOI: 10.1080/02684527.2012.699285.
- 8. Brennan Centre for Justice (BCJ). (2017). *Trump-Russia Investigations: A Guide,* New York University School of Law, online at

https://www.brennancenter.org/sites/default/files/2019-08/Report\_Trump-Russia%20Investigations 0.pdf

- 9. Buchanan, J. M. (1987). "The Constitution of Economic Policy", in American Economic Review. 77 (1987, June): 243-250.
- 10. Carayannis, Elias G., Campbell, David F. J., Rehman, Scheherazade S. (2016). "Mode 3 knowledge production: Systems and systems theory, clusters and networks", Journal of Innovation and Entrepreneurship, ISSN 2192-5372, Springer, Heidelberg, Vol. 5, Iss. 17, p. 1-24, http://dx.doi.org/10.1186/s13731-016-0045-9
- 11. Commission on the Roles and Capabilities of the United States Intelligence Community (CRCUSIC). (1996). *Preparing for the 21st Century. An Appraisal of US Intelligence*, online at https://fas.org/irp/offdocs/report.html
- 12. Comparative Constitutions Project (CCP). (2014). *Relationship between characteristics data and chronology*, online at https://constitution-unit.com/2014/04/23/new-data-available-from-the-comparative-constitutions-project/
- 13. Congressional Research Service (CRS). (2020). "Intelligence Community Support to Pandemic Preparedness and Response", *In Focus*, online at https://fas.org/sgp/crs/intel/IF11537.pdf
- 14. Easton, D. (1965a). *Political life as a system of behaviour. In D. Easton (Ed.). A framework for political analysis* (p. 23–34). Englewood Cliffs: Prentice-Hall.
- 15. Easton, D. (1965b). "Theory and behavioural research". In D. Easton (Ed.). A framework for political analysis (p. 1–22). Englewood Cliffs: Prentice-Hall.
- 16. Eiran, Ehud. (2020). "Israel: Politics and Identity in Coronavirus times', in *The COVID-19 Pandemic in the Middle East and North Africa,* POMEP Studies 39, online at https://www.researchgate.net/publication/ 340793965\_ Israel\_Politics\_and\_Identity\_in\_Coronavirus\_times/link/5e9e171b458515083 9ef39da/download
- 17. European Commission. (2021). Horizon Europe Strategic Plan (2021 2024),  $1^{\rm st}$  ed., Luxembourg: Publications Office of the European Union, 2021 doi:10.2777/083753
- 18. European Parliament (EP). (2021). Foreign interference in democracies. Understanding the threat, and evolving responses, Briefing, online at https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/652082/EPRS\_BRI(2020)652082\_EN.pdf
- 19. Five Eyes Intelligence Oversight and Review Council (FIORC). (2017). Charter of the Five Eyes Intelligence Oversight and Review Council,

online at https://www.dni.gov/files/ICIG/Documents/Partnerships/FIORC/Signed%20FIORC%20Charter%20with%20Line.pdf

- 20. Foerster von, Heinz. (1960). "On Self-Organizing Systems and Their Environments," in Marshall C. Yovits and Scott Cameron, eds., Self-Organizing Systems (Oxford).
- 21. Foerster, H. V. (1979). "Cybernetics of cybernetics'. In K. Krippendorff (Ed.), Communication and control in society (p. 5–8). New York: Gordon and Breach.
- 22. Gentry, John A. (2020). "The New Politicization of the U.S. Intelligence Community", *International Journal of Intelligence and CounterIntelligence*, 33:4, 639-665, DOI: 10.1080/08850607.2020.1783134
- 23. Georgescu-Roegen, N. (1975). "Energy and Economic Myths', *Southern Economic Journal*, Vol. 41, No. 3, p. 347-381, online at http://www.uvm.edu/~jfarley/EEseminar/readings/energy%20myths.pdf
- 24. International Accounting Standards (IAS), online at https://www.iasplus.com/en/standards/
- 25. Kahana, Ephraim. (2021). "Intelligence Against COVID-19: Israeli Case Study", *International Journal of Intelligence and CounterIntelligence*, 34:2, p. 259-266, DOI: 10.1080/08850607.2020.1783620
- 26. Kerke van de, T. W. and Hijzen, C. W. (2021). "Secrecy, evidence, and fear: exploring the construction of intelligence power with Actor-Network Theory (ANT)", *Intelligence and National Security*, 36: 4, 527-540, DOI: 10.1080/02684527.2021.1893074
- 27. Kirzner, I., M. (2009). "The Alert and Creative Entrepreneur: A Clarification," Small Business Economics 32(2):145-152, online at DOI:10.1007/s11187-008-9153-7
- 28. Knodt, E., M. (1995). Foreward, in N. Luhmann, *Social Systems*. Stanford, CA: Stanford University Press.
- 29. Laslo, Alexander, Krippner, Stanley. (1998). *Chapter 3 Systems Theories: Their Origins, Foundations, and development, Advances in psychology*, p. 47-74, DOI: 10.1016/S0166-4115(98)80017-4
- 30. Legrand, T. (2019). "Sovereignty renewed: Trans-governmental Policy Networks and the Global-Local Dilemma", in The *Oxford Handbook of Global Policy and Transnational Administration*, eds. Diane Stone, Kim Moloney, pp 200-222, online at https://books.google.com.au/books?id=Ex6DDwAAQBAJ&printsec=frontcover#v=onepage&q&f=false
- 31. Legrand, T. (2020). "From Insularity to Exteriority: How the Anglo sphere is Shaping Global Governance, in Understanding the Five Eyes", *Conference proceedings*, Centre for International Policy Studies, uOttawa, online at https://osf.io/k35pw/?show=revision

- 32. Leyen von der, Ursula. (2019). *A Union that strives for more. My agenda for Europe. Political Guidelines for the Next European Commission 2019-2024*, online at https://ec.europa.eu/info/sites/default/files/political-guidelines-next-commission en 0.pdf
- 33. Luhmann, N. (1995) *Social Systems*, translated by J. Bednarz and D. Beacker, Stanford University Press, Stanford, CA.
- 34. Luhmann, N. (2000). *Die Politik der Gesellschaft*, Frankfurt am Main: Suhrkamp.
- 35. Malthus, Thomas, Robert. (1998). "An Essay on the Principle of Population, 1998", Electronic Scholarly Publishing Project, online at http://www.esp.org/books/malthus/population/malthus.pdf
- 36. Martin-Breen, P. and Anderies, J. M. (2011). *Resilience: A Literature Review*, September 18, online at https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/3692
- 37. Mathiesen, J., Mitarai, N., Sneppen, K., and Trusina, A. (2011). *Ecosystems with Mutually Exclusive Interactions Self-Organize to a State of High Diversity*, Phys. Rev. Lett., 107/8, online at https://doi.org/10.1103/PhysRevLett.107.188101
- 38. Maupertuis principle. V.V. Rumyantsev (originator), *Encyclopaedia of Mathematics.*, online at http://www.encyclopediaofmath.org/index.php?title=Maupertuis\_principle&oldid=17452
- 39. McPhee, Justin T. (2020). *Spinning the Secrets of State: Politics and Intelligence in Australia*, Melbourne: Monash University Publishing, 2020.
- 40. Mele, Cristina; Pels, Jacqueline; Polese, Francesco. (2010). *A Brief Review of Systems Theories and Their Managerial Applications*. Service Science 2(1-2):126-135, online at: https://doi.org/10.1287/serv.2.1\_2.126
- 41. National Intelligence Council (NIC). (2012). *Global Trends 2030: Alternative Worlds*, online at https://www.dni.gov/files/documents/GlobalTrends\_2030.pdf
- 42. National Intelligence Council (NIC). (2021). *Foreign Threats to the 2020 US Federal Election*, declassified version of a report provided to the President, online at https://www.dni.gov/files/ODNI/documents/assessments/ICA-declass-16MAR21.pdf
- 43. Oneașcă, I. (2018). *The European Social Model Transformations needed in the light of international competitiveness and enlargement towards Southeast Europe* (Doctoral dissertation, Romanian Academy, in Romanian). Bucharest.
- 44. OECD. (2015 c). Frascati Manual 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development, The

Measurement of Scientific, Technological and Innovation Activities, OECD Publishing, Paris, *DOI: http://dx.doi.org/10.1787/9789264239012-en* 

- 45. Office for National Statistics (ONS). (2018). *Household satellite account*, UK: 2015 and 2016, online at https://www.ons.gov.uk/economy/nationalaccounts/satelliteaccounts/articles/householdsatelliteaccounts/2015 and 2016 estimates
- 46. Parsons, Talcott. (1965). *Il Sistema Sociale*. Torino Edizioni: Comunità.
- 47. Petersen, Karen Lund. (2019). "Three concepts of intelligence communication: awareness, advice or co-production?", *Intelligence and National Security*, 34:3, 317-328, DOI:10.1080/02684527.2019.1553371
- 48. Petersen, K. L. and Tjalve, V. S. (2018). "Intelligence expertise in the age of information sharing: public–private 'collection' and its challenges to democratic control and accountability", *Intelligence and National Security*, 33:1, 21-35, DOI: 10.1080/02684527.2017.1316956
- 49. Petersen, K. L. and Rønn, K. V. (2019). "Introducing the special issue: bringing in the public. Intelligence on the frontier between state and civil society", *Intelligence and National Security*, 34:3, 311-316, DOI: 10.1080/02684527.2019.1553365
- 50. Piketty, Thomas. (2014). *Capital in the Twenty-First Century, Translated by Arthur Goldhammer, The Belknap Press of Harvard University Press*, online at https://dowbor.org/blog/wp-content/uploads/2014/06/14Thomas-Piketty.pdf
- 51. Stichweh, Rudolf. (2011). "Systems Theory". International Encyclopaedia of Political Science. Edited by Bertrand Badie, Dirk Berg-Schlosser and Leonardo Morlino, DOI:http://dx.doi.org/10.4135/9781412994163
- 52. Thelen, E., & Smith, L. (2006). "Dynamic Systems Theories', in *Handbook of Child Psychology, Theoretical Models of Human Development,* 6th Edition, eds. William Damon, Richard M. Lerner, p. 258-312.
- 53. UNCTAD (United Nations Conference on Trade and Development). (2020). *Technology and Innovation Report 2021*, UN, Geneva.
- 54. UNDP and MBRF (Mohammed Bin Rashid Al Maktoum Knowledge Foundation). (2020). *Global Knowledge Index*, online at https://www.undp.org/content/undp/en/home/librarypage/capacity-building/Global-Knowledge-Index-2020.html
- 55. UNESCO-UIS. (2014). *ISCED Fields of Education and Training 2013 (ISCED-F 2013)*, UNESCO, Paris.
- 56. United Nation, DESA. (2019). *World Population Prospects 2019*, online at https://population.un.org/wpp/Population Division

- 57. United Nation, DESA. (2020). *World Social Report 2020 Inequality in a Rapidly Changing World*, UN 2020, online at https://www.un.org
- 58. UNODC (United Nations Office on Drugs and Crime), (2011). *Criminal Intelligence. Manual for Analysts. UN*, online at https://www.unodc.org/documents/organized-crime/Law-Enforcement/Criminal\_Intelligence\_for\_Analysts.pdf
- 59. U.S. Department of Justice (USDJ). (2019). *III Report On The Investigation Into Russian Interference In The 2016 Presidential Election, Special Counsel Robert S. Mueller*, online at https://www.justice.gov/archives/sco/file/1373816/download
- 60. US PUBLIC LAW 108–458 DEC. 17. (2004). *Intelligence reform and terrorism prevention act of 2004*, online at https://www.govinfo.gov/content/pkg/PLAW-108publ458/pdf/PLAW-108publ458.pdf
- 61. Wendt, A. (1992). "Anarchy is what States Make of it: The Social Construction of Power Politics". *International Organization*, *46*(2), 391-425, online at http://www.istor.org/stable/2706858
- 62. Wheaton, Kristan J.; Beerbower, Michael T. (2006). "Towards a New Definition of Intelligence", vol 17, *Stanford Law & Policy Review* 319 (2006), https://law.stanford.edu/publications/towards-new-definition-intelligence/
- 63. White House. (2019). *Executive Order 13859 of February 11, 2019*, online at https://www.federalregister.gov/documents/2019/02/14/2019-02544/maintaining-american-leadership-in-artificial-intelligence
- 64. White House. (2021). "Interim National Security Strategic Guidance", The White House, Washington, online at https://www.whitehouse.gov/wp-content/uploads/2021/03/NSC-1v2.pdf
- 65. Wigell, Mikael. (2021). "Democratic Deterrence: How to Dissuade Hybrid Interference", *The Washington Quarterly*, vol. 44, pp. 49-67, doi: 10.1080/0163660X.2021.1893027
- 66. World Bank. (2021). *World Development Report 2021: Data for Better Lives.* Washington, DC: World Bank. Doi: 10.1596/978-1-4648-1600-0.