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THE STRUGGLE FOR DIGITAL *DASEINSVORSORGE*: AUTONOMY AND INFRASTRUCTURAL DEPENDENCE IN EUROPE IN THE AGE OF DIGITAL POWERS. THE GAIA-X PROJECT AS A CASE STUDY**

Abstract [It]: Il contributo rilegge il concetto di *Daseinsvorsorge*, teorizzato da Forsthoff, nell'odierno ecosistema digitale, analizzando come le infrastrutture tecnologiche essenziali siano ormai controllate da poteri privati transnazionali. Questa asimmetria genera una 'sovranità dimidiata' per gli Stati europei, costretti a dipendere da attori esterni per la garanzia dei propri servizi essenziali. Attraverso il caso studio del progetto Gaia-X, il saggio evidenzia inoltre i limiti strutturali e le contraddizioni dei tentativi europei di riconquistare l'autonomia strategica e infrastrutturale, sollevando un problema di controllo democratico e costituzionale che va oltre la mera tutela della concorrenza.

Abstract [En]: This paper revisits Forsthoff's concept of *Daseinsvorsorge* within today's digital ecosystem, analyzing how essential technological infrastructures are currently controlled by transnational private powers. This asymmetry generates a 'diminished sovereignty' for European States, which are forced to depend on external actors to guarantee their own essential services. Through the case study of the Gaia-X project, the essay highlights the structural limitations and contradictions of European attempts to regain strategic and infrastructural autonomy, raising an issue of democratic and constitutional oversight that goes beyond mere antitrust regulation.

Parole chiave: *Daseinsvorsorge* digitale, Sovranità digitale, Gaia-X, Capitalismo digitale.

Keywords: Digital *Daseinsvorsorge*, Digital Sovereignty, Gaia-X, Digital Capitalism.

TABLE OF CONTENTS: 1. Introduction. – 2. *Daseinsvorsorge* in Ernst Forsthoff's Thought. – 3. Digital *Daseinsvorsorge* between Public Provision and Private Power. – 4. New Forms of Dependence and Social Power in the Provision of Digital *Daseinsvorsorge*. – 5. The Gaia-X Project as an Example of the Search for Digital Infrastructure Independence. – 6. Conclusions.

1. Introduction

Technologically advanced societies require a range of infrastructures and services that are indispensable to collective life. Without road networks, water supply

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systems, or public transportation, individual existence and social life would be impossible. Modern individuals, embedded in a complex and interdependent society, are therefore dependent on a range of services they cannot provide for themselves.

This condition became particularly evident during the 20th century, with the transition from a predominantly agricultural society to an industrialized and urbanized one. The German jurist Ernst Forsthoff, one of the leading exponents of 20th-century German administrative law, was among the first to recognise the scale of these transformations. Forsthoff developed the concept of *Daseinsvorsorge* - which can be translated as 'provision for existence' - to describe these new essential public services, upon which individual existence and the possibility of participating in social and economic life in a complex society depend. In this sense, *Daseinsvorsorge* represents an 'objective constraint' that public administration must ensure, as it constitutes the indispensable prerequisite for the functioning of a developed society. It represents the foundation upon which the social structure and the economic system are built.

In the twentieth century, certain infrastructures and services shaped by the typical needs of industrial society took center stage. It is legitimate to ask, however, what the essential infrastructures of the twenty-first-century digital society are today. Indeed, the digital environment in contemporary societies is one of the main basic infrastructures, upon which a whole range of services indispensable for social and economic development depend.

In this paper, the concept of *Daseinsvorsorge* is revisited and applied to the digital context. We will show how this concept takes on new contours in the digital ecosystem, where, first and foremost, the actors responsible for providing essential services are changing. While in the twentieth century it was primarily the state that assumed these functions - either directly or by establishing rules to which private providers had to conform - in the digital world they are increasingly provided by private actors with a transnational character. This transformation inevitably raises new issues concerning the sovereignty and decision-making autonomy of public authorities, which find themselves dependent on external actors for the provision of services necessary for their own functioning.

The paper will therefore focus on the case study of cloud computing in the European digital space, which is particularly significant for understanding the forms of dependence that can develop in cyberspace. Digital infrastructure in Europe is provided by transnational and non-European private companies, with potential implications for the autonomy of the public institutions that depend on them. Aware of these challenges, in recent years European institutions and Member States have launched various initiatives aimed at promoting European digital autonomy. Among these, the Gaia-X project has played a central role. We will examine its developments and results to evaluate whether it has

effectively succeeded in reducing Europe's dependence on large private digital service providers.

2. *Daseinsvorsorge* in Ernst Forsthoff's Thought

In 1938, Ernst Forsthoff published *Die Verwaltung als Leistungsträger*[1]. In this work, the German legal scholar distanced himself from the liberal conceptions of administrative law prevalent in the prewar period. The new modern industrialized society indeed required a profound rethinking of the role of public administration. In a context characterized by growing urbanization and technical and economic development, the administration must assume the task of guaranteeing the material conditions necessary for collective life, above all through the provision of public services. Forsthoff summarizes these observations in the famous concept of *Daseinsvorsorge*, which was destined to have an enduring influence on German administrative law[2].

According to Forsthoff, in the nineteenth-century constitutional state, the basic principle of administrative law was the principle of administrative legality. Administrative law thus had a predominantly defensive function: it established the limits within which the state could legitimately intervene in the freedom and property of individuals[3]. This approach reflected the structure of the liberal state, founded on the distinction between state and society. The state was autonomous from society and did not intervene in it; civil society, meanwhile, was autonomous from the state and self-regulated its economic and private relations[4]. Consequently, individuals already found within society the conditions to survive and prosper. The state was required only to leave individuals free to act and not to intervene

[1] E. FORSTHOFF, *Die Verwaltung als Leistungsträger*, Stuttgart, Kohlhammer Verlag, 1938.

For discussions of Forsthoff's thought, see F. MEINEL, *Der Jurist in Der Industriellen Gesellschaft. Ernst Forsthoff Und Seine Zeit*, Berlin, De Gruyter Akademie Forschung, 2011; C. SCHÜTTE, *Progressive Verwaltungsrechtswissenschaft auf konservativer Grundlage. Zur Verwaltungsrechtslehre Ernst Forsthoffs*, Berlin, Duncker & Humblot, 2006; F. MEINEL, *Ernst Forsthoff and the Intellectual History of German Administrative Law*, in *German Law Journal*, no. 8, 2007, 785–800; A. MANGIA, *Valori e interpretazione in Ernst Forsthoff*, in *JUS Rivista di scienze giuridiche*, XLI(1), 1994, 5–24; G. DI GASPARE, *Stato sociale e Stato di diritto in Forsthoff e Habermas*, in *JUS Rivista di scienze giuridiche*, XLI(1), 1994, 115–134; B. SORDI, *Il primo e l'ultimo Forsthoff*, in *Quaderni fiorentini per la storia del pensiero giuridico moderno*, XXV, 1996, 667–682; P. TECHET, *Das Konzept der „Daseinsvorsorge" bei Ernst Forsthoff als Legitimation des autoritären Staates*, in *Historia Constitucional*, no. 23, 2022, 324–362; N. MAGALDI, *El concepto de procura existencial (Daseinsvorsorge) en Ernst Forsthoff y las transformaciones de la administración pública*, in *Revista de Derecho Público: Teoría y Método*, 1, 2020, 147–174; M. GIAVAZZI, *I servizi di interesse economico generale nella dimensione della "Daseinsvorsorge" di Forsthoff*, in *Rivista italiana di diritto pubblico comunitario*, XXXIV(4), 2024, 659-695.

[2] F. MEINEL, *Ernst Forsthoff and the Intellectual History of German Administrative Law*, cit., 788.

[3] Forsthoff cites Otto Mayer as the founder of the nineteenth-century German administrative law system. See O. MAYER, *Deutsches Verwaltungsrecht*, Berlin, Duncker & Humblot, 2004.

[4] For the nineteenth-century distinction between the state and society, see M. FIORAVANTI, *Il cerchio e l'ellisse. I fondamenti dello Stato costituzionale*, Roma-Bari, Laterza Editore, 2020; and M. STOLLEIS, *Geschichte des öffentlichen Rechts in Deutschland. Bd. 2. Staatsrechtslehre und Verwaltungswissenschaft 1800–1914*, Munich, C.H. Beck, 2017.

in social affairs. And the task of administrative law consisted essentially in regulating and limiting the exercise of public power.

The administration of the nineteenth-century state was thus conceived as an administration 'of authority', which was not required to provide services to the population but rather to intervene as little as possible. This structure, however, changed radically with the new century. Rapid industrialization and population growth led to profound social transformations that radically altered the relationship between the individual, society, and the administration.

In a highly industrialized society, individuals are no longer able to provide for their basic needs independently. It becomes necessary to rely on institutions that can guarantee the essential services required for individuals' survival and for the functioning of society. To explain this transformation, Forsthoff develops the distinction between *effektiver Raum* and *beherrschter Raum*. *Beherrschter Raum* refers to the space dominated by man, that which is entirely at his disposal. This includes, for example, the land he owns and the house in which he lives. *Effektiver Raum*, on the other hand, is the space that is not under man's direct control, but where he actually lives his life.

In agricultural society, much of life took place within *beherrschter Raum*. Industrialization and technological progress, instead, have led to a gradual expansion of *effektiver Raum* and a simultaneous contraction of the space directly controlled by the individual. The peasant home, integrated into the farmland and capable of ensuring significant self-sufficiency, has been replaced by an urban dwelling embedded in a complex network of infrastructure and services. At the same time individuals can now significantly expand their sphere of action thanks to transportation and the new possibilities offered by technology.

As this analysis reveals, these transformations entail a growing dependence on collective structures. If people had a large *beherrschter Raum*, they could independently procure the goods necessary for their existence. But as this space decreases, the satisfaction of basic needs depends increasingly on services provided by external agencies. It is in this context that Forsthoff introduces the concept of *Daseinsvorsorge*. It is the set of services on which massified, no longer autonomous, individuals depend for their very existence. Forsthoff states:

> Diejenigen Veranstaltungen, welche zur Befriedigung des Appropriationsbedürfnisses getroffen werden, bezeichne ich als *Daseinsvorsorge*. Dabei soll die schwierige Frage, ob sich hier die notwendigen und die Luxusbedürfnisse scheiden lassen und wie diese Scheidung zu vollziehen sein würde, als in diesem Zusammenhang nicht wesentlich beiseite bleiben. Die Verantwortung für die Befriedigung dieser Appropriationsbedürfnisse nenne ich *Daseinsverantwortung*[5].

With the concept of *Daseinsvorsorge*, Forsthoff thus refers to «die Darbringung von Leistungen, auf welche der in die modernen massentümlichen Lebensformen verwiesene

[5] E. FORSTHOFF, *Die Verwaltung als Leistungsträger*, cit., 6.

English translation: «I designate those measures taken to satisfy the need for appropriation as *provisions for existence*. In this context, the difficult question of whether necessary needs can be distinguished from luxury needs, and how

Mensch lebensnotwendig angewiesen ist»[6]. Together with this concept, however, Forsthoff introduces another one: *Daseinsverantwortung*, namely responsibility for satisfying these needs. He distinguishes chronologically between three types of responsibility: individual, collective, and political.

In the era of *Hochcapitalismus* - corresponding to nineteenth-century liberal capitalism - individual responsibility for one's own existence prevails[7]. In this era, the extent of *beherrschter Raum* still allows individuals to provide their own needs autonomously.

With the advance of industrialization and the economic and social transformations of the late nineteenth century, a new form of collective responsibility emerges. Society gradually organized itself into groups and organizations, moving away from the individualistic model of the liberal state. Responsibility for one's existence was thus transferred from the individual to the solidarity of the social group, but at the risk of undermining the political unity of the state.

The analysis of this new form of responsibility, which reached its culmination in the Weimar Republic, reveals the evident influence of Carl Schmitt, Forsthoff's mentor. In his writings from the early 1930s, Schmitt describes broadly the economic and political transformations taking place in Weimar with the concept of *totaler Staat*. By this term, he refers to the new relationship between society and the state that emerged in the 20th century. It is characterized by the dissolution of the distinction between the state and the economy/society, with society becoming part of the state and the state intervening in every aspect of the economy[8]. Society is now organized into economic powers and collective organizations. These exert pressure on the state and force it to serve its own interests.

Of course, when Schmitt speaks of the *totaler Staat*, this concept must be distinguished from the different concept of totalitarianism. For Schmitt, the term *total* refers to the new, chaotic, and disorderly mass society of the twentieth century. It is dominated by new social powers. These powers have invaded the state and revolutionized the clear political-legal

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such a distinction should be made, may be set aside as non-essential. The responsibility for satisfying these needs for appropriation I call *existential responsibility*».

[6] *Ibid.*, 7.

English translation: «the provision of services upon which modern man, cast into mass-society ways of life, is fundamentally and indispensably dependent».

[7] Forsthoff's perspective was undoubtedly shaped by the dynamics of German industrialization. Nineteenth-century Germany was indeed a country that industrialized relatively late compared with other European powers and experienced a phase of rapid development only during the Second Industrial Revolution at the end of the century.

See S. BAUER, *Anatomie der konservativen Revolution*, Darmstadt, Wiss Buchges, 1993.

[8] The concept of the *totaler Staat* is introduced for the first time in C. SCHMITT, *Die Wendung zum totalen Staat*, in ID., *Positionen und Begriffe im Kampf mit Weimar–Genf–Versailles 1923–1939*, Berlin, Duncker & Humblot, 1994, 166–178 and in C. SCHMITT, *Der Hüter der Verfassung*, Berlin, Duncker & Humblot, 2016.

In two essays written between 1932 and 1933, the concept is revisited and further developed. Schmitt specifically speaks now of the 'quantitative total state' and the 'qualitative total state'. The former (the Weimar Republic) is a victim of the 'indirect powers' that arise within civil society. The second (the state re-legitimized by plebiscite through the Reich President) is capable, thanks to its political strength, of depoliticizing social powers and reestablishing the primacy of its own public command. See C. SCHMITT, *Starker Staat und gesunde Wirtschaft*, in ID., *Staat, Großraum, Nomos. Arbeiten aus den Jahren 1916–1969*, Berlin, Duncker & Humblot, 1995, 71–94, and C. SCHMITT, *Weiterentwicklung des totalen Staats*, in ID., *Positionen und Begriffe*…, cit., 211–216.

categories of nineteenth-century liberal doctrine. Totalitarianism, on the other hand, is merely one of the possible responses to this disorder. It is an attempt to impose a hierarchical order on the new mass society through integral politicization. Under totalitarianism, power pervades every aspect of life and even takes control of the biological reality of its citizens. Schmitt, instead, wants to put an end precisely to this mixture of public and private (at least until his adherence to Nazism in 1933), artificially restoring (through a voluntaristic and authoritative act of depoliticization) the clear-cut distinctions of the nineteenth century[9].

For Schmitt, therefore, this collectivist transformation of the economy threatens to dissolve political unity by subordinating the state to the interests of various economic and social forces. Forsthoff shares this view. For him as well, the emergence of conflicting interests is a threat to the integrity of political unity. For this reason, collective *Verantwortung* must be superseded in favor of political *Verantwortung*. It is therefore the responsibility of the modern public administration, anchored in the 'political state', to guarantee the infrastructure and services without which modern man could not survive.

This aspect of Forsthoff's thought exhibits markedly conservative traits. His theory - and the concept of *Daseinsvorsorge* itself - can be interpreted as a conservative attempt to reestablish the state's lost authority, strengthening and consolidating it through administration. The state thus finds a new source of legitimacy in its ability to provide services to society, without truly opening itself up to the demands coming from society[10].

However, a more updated and, in some respects, 'progressive' application of Forsthoff's work is also possible[11]. The author deserves credit for having opened administrative thought to the economic and social transformations of the 20th century. The category of *Daseinsvorsorge* gave the scholars an important concept for interpreting social changes, moving beyond the outdated liberal categories of nineteenth-century doctrine. This ability to engage with societal developments allowed Forsthoff to anticipate, well in advance, the

[9] On *total* and totalitarianism, see J.P. FAYE, *Introduction aux langages totalitaires: Théorie et transformations du récit*, Paris, Les éditions Hermann, 2003. On the concept of *total* in Schmitt, see C. GALLI, *Strategie della totalità: Stato autoritario, Stato totale, totalitarismo nella Germania degli anni Trenta*, in *Filosofia politica*, 1997, no. 1, 27–62; and M. GREGORIO, *La breve vita (o forse no) del concetto schmittiano di Stato totale*, in T. GAZZOLO - S. PIETROPAOLI (eds.), *Il corvo bianco. Carl Schmitt davanti al nazismo*, Macerata, Quodlibet, 2022, 303–318.

[10] P. TECHET, *Das Konzept der „Daseinsvorsorge" bei Ernst Forsthoff als Legitimation des autoritären Staates*, cit., 326.

When evaluating the conservative nature of Forsthoff's categories, it must not be forgotten that the essay on *Daseinsvorsorge* was written in 1938, at the height of the Nazi era, and that the author supported the regime at that time. It must also be noted, however, that Forsthoff's concept did not fully align with Nazi ideology. Indeed, Nazi ideology displaced the state from its role in the legal system and replaced it with the 'people', understood as an ethnically homogeneous group. As Peter Techet argues, Forsthoff's attempt to provide the state with a new basis of legitimacy through the concept of *Daseinsvorsorge* can also be understood as a cautious distancing from the prevailing *völkisch* Nazi jurisprudence. *Ibid.*, 336.

[11] F. MEINEL, *Ernst Forsthoff and the Intellectual History of German Administrative Law,* cit., 798.

new challenges that the law would face, including those arising from technological advancements and environmental crises.

We refer to Forsthoff's final work, published in 1971, *Der Staat der Industriegesellschaft*. In this work, the German jurist no longer considers the state capable of governing the dynamics of technology, because of the development of science and industry. The state, as had already happened in Weimar, appears once again to be subject to the dynamics of industrial society, which creates needs (often superfluous) and at the same time provides the services to satisfy them. This raises the question of who can defend the individual from the threats of technological development. Forsthoff states that in the technological society:

> Es geht nicht mehr nur um die Freiheit, sondern um die menschliche Umwelt und nicht zuletzt um den Menschen selbst. Sie bedürfen eines Garanten, und das unvergleichlich viel vordringlicher als der freiheitliebende Bürger früherer Zeiten. Angesichts dessen ist die so vielseitig verherrlichte Ineffizienz des heutigen Staates ein fatales Symptom[12].

Forsthoff thus anticipates very topical issues, such as the control and regulation of technological (and today, digital) processes, which cannot be left solely to the intrinsic dynamics of technical development. This demonstrates how the concept of *Daseinsvorsorge*, despite its original formulation within an authoritarian theoretical framework, can also be applied for different purposes. As we shall see, this category has recently been revived to describe certain political dynamics of the digital society. In particular, it has been used to explain the forms of dependence of public institutions - particularly European ones - on the actors who control key technological infrastructures.

3. Digital *Daseinsvorsorge* between Public Provision and Private Power

As mentioned earlier, the concept of *Daseinsvorsorge*, developed by Forsthoff, became a key category of 20th-century German administrative law and has recently been rediscovered to explain certain transformations in today's digital society[13].

Daseinsvorsorge is indeed a dynamic concept. It includes the essential services required by a given society and therefore inevitably varies as social needs change. In an increasingly

[12] E. FORSTHOFF, *Der Staat der Industriegesellschaft. Dargestellt am Beispiel der Bundesrepublik Deutschland*, München, C.H. Beck Verlag, 1971, 28-29.

In English: «It is no longer merely a matter of freedom, but of the human environment and, not least, of man himself. They stand in need of a guarantor, and this far more urgently than the freedom-loving citizen of earlier times. In light of this, the much-glorified inefficiency of the contemporary state is a fatal symptom».

[13] For recent studies on digital *Daseinsvorsorge*, see J. MEIER - T. BROSZE - U. PAPENFUß - M. WIESCHE (eds.), *Digitale Daseinsvorsorge. Stadtwerke als Treiber der digitalen Transformation für Kommunen, Land und Bund*, Wiesbaden, Springer Gabler, 2024; T. KLENK - F. NULLMEIER - G. WEWER (eds.), *Handbuch Digitalisierung in Staat und Verwaltung*, Wiesbaden, Springer VS, 2019; D. PIÉTRON, *Digitale Privatisierung. Konflikte um Daten und Plattformen in der öffentlichen Daseinsvorsorge*, Bielefeld, transcript Verlag, 2026.

digitized context, exclusion from access to the Internet or digital platforms represents a serious social disadvantage, which can result in actual exclusion from collective life.

Daseinsvorsorge refers to the infrastructure and services necessary to ensure an individual's livelihood and participation in a complex society. In an increasingly digitized society, such participation depends on access to certain technological services and infrastructure. It can therefore be argued that Internet access, the availability of digital devices, digital literacy, and the provision of essential IT services must be placed at the center of contemporary *Daseinsvorsorge*[14].

Any discussion on digital *Daseinsvorsorge* must be accompanied by an examination of the new infrastructure and essential services in the digital society. While analog *Daseinsvorsorge* was based on the management of material resources (water, energy, transportation, etc.), digital *Daseinsvorsorge* is based on data management. Data indeed constitutes the raw material on which most contemporary digital services depend. Consequently, understanding the structure of digital *Daseinsvorsorge* requires, first and foremost, an analysis of the infrastructure and processes that enable the collection, transmission, storage, processing, and provision of data. Data management comprises three basic levels: an infrastructure level, a platform level, and a service level. The infrastructure level represents the physical infrastructure that enables the collection and transmission of data. The platform level ensures the cleaning, harmonization and processing of data, allowing the conversion of data from different sources. Finally, the service level includes the applications and services designed for private and commercial users[15].

Despite the specific nature of digital infrastructure, the logic underlying *Daseinsvorsorge* remains essentially the same: to guarantee the material and organizational conditions without which participation in social life would not be possible. However, the key difference from traditional *Daseinsvorsorge* lies in the providers of these services. Historically, *Daseinsvorsorge* has been provided by public administration. These services have also been provided by private entities. However, public institutions have traditionally sought to steer private economic activity through regulation in pursuit of the public interest. With the digitization of *Daseinsvorsorge*, however, an entirely new relationship between the public and private spheres has emerged. Despite existing regulations, large multinational Internet

[14] C. RÄUCHLE - G. AMBROSIUS, *Digitale Daseinsvorsorge in historischer Perspektive. Was ist eigentlich neu oder nicht neu im Vergleich zur analogen?*, in *Zeitschrift für Gemeinwirtschaft und Gemeinwohl*, 44, 2021, no. 4, 595-614.

[15] The three levels of digital *Daseinsvorsorge* are illustrated in U. PAPENFUß - J. MEIER, *Digitale Daseinsvorsorge: Definition und Veranschaulichung als neue Säule der Daseinsvorsorge*, in J. MEIER - T. BROSZE - U. PAPENFUß - M. WIESCHE (eds.), *Digitale Daseinsvorsorge,* cit., 15–19.

companies, thanks to their enormous economic power, exercise an influence difficult to control over the essential infrastructure that they themselves manage.

On the one hand, therefore, these services are not provided by public entities but by private ones; on the other hand, these same private operators have such economic power that they can significantly influence the effectiveness of existing regulations[16].

4. New Forms of Dependence and Social Power in the Provision of Digital *Daseinsvorsorge*.

This section analyzes the structure of economic powers that operate in the digital market and provide digital *Daseinsvorsorge*. As we will try to show, the structure of digital capitalism tends to create a form of dependence of public institutions on the large private operators that control the main technological infrastructures.

It has been argued that essential services of digital *Daseinsvorsorge* are today provided predominantly by the 'private powers' [17] of digital capitalism. The link between the concept of power and that of the digital sphere is not coincidental. Yet, if it seems almost self-evident today, in the early days of the Internet it would likely have been considered out of place. The Internet indeed was initially thought of as a space free from the traditional powers - both public and private - of the physical world. As John Perry Barlow, one of the first digital activists, argued in 1996 at the Davos Forum:

> We are creating a world that all may enter without privilege or prejudice accorded by race, economic power, military force, or station of birth. We are creating a world where anyone, anywhere may express his or her beliefs, no matter how singular, without fear of being coerced into silence or conformity[18].

Cyberspace was conceived as a 'libertarian' space, free from both state power and the economic power of the market. However, this vision was quickly disproved by the evolution of digital capitalism. In just a few years, new private economic powers emerged and transformed the digital market into a highly oligopolistic and centralized one.

This dynamic does not concern only the digital sector but reflects a more generalized transformation within contemporary capitalism. Numerous recent studies have highlighted how markets have progressively lost their competitive character. A notable example is

[16] C. RÄUCHLE - G. AMBROSIUS, *Digitale Daseinsvorsorge in historischer Perspektive*, cit., 610-611.

[17] G. LOMBARDI, *Potere privato e diritti fondamentali*, Torino, Giappichelli Editore, 1967.

[18] J. P. BARLOW, *A Declaration of the Independence of Cyberspace*, February 8, 1996. https://www.eff.org/cyberspace-independence

Thomas Philippon's book, *The Great Reversal*, where the author describes the radical reversal of U.S. markets, which have shifted from competitive to essentially monopolistic markets[19].

Digital capitalism[20] must be viewed within this process of concentration as well. A handful of companies - Google, Facebook, Amazon, Apple, and Microsoft foremost among them - were able to prevail in the market, absorbing competitors and resisting the rapid obsolescence that had characterized early digital firms. The market presence of these large companies has therefore become pervasive and openly monopolistic[21]. This process of economic concentration has been achieved primarily by making market access structurally difficult and progressively reducing the degree of contestability. Just consider that over the past twenty years, Amazon, Apple, Google, Facebook, and Microsoft have collectively acquired 770 competing startups, effectively eliminating potential competition[22]. These companies have thus attained enormous economic and financial scale, which has allowed them to exercise significant influence even on financial markets. They now even dominate Wall Street, where they account for about 25 percent of the entire stock market index[23].

Large digital service providers are now global 'private powers'. Their economic strength is accompanied by significant political influence. Economic concentration allows them to impact the policies of nation-states, steering their economic and regulatory decisions. Their 'political power' lies in their ability to have regulations that might conflict with their interests either set aside or negotiated[24]. A prime example is the case of antitrust regulation in the United States, where laws in effect since the late 19th century have been 'frozen' since the

[19] T. PHILIPPON, *The Great Reversal. How America Gave Up on Free Markets*, Cambridge, Harvard University Press, 2019.

This transformation is also highlighted by Tim Wu. He points out that we are seeing a «return to concentrated economies - that is, industries that are dominated by fewer and larger companies, especially in the developed world. In 2015, the average market capitalization of the top hundred firms was a staggering seven thousand times that of the average for the bottom two thousand firms, whereas in 1995 it was just thirty-one times higher. Similarly, since the year 2000, across US industries the measures of market concentration have increased in over 75 per cent of industries» T. WU, *The Curse of Bigness: How Corporate Giants Came to Rule the World*, London, Atlantic Books, 2020, 15 (digital version).

[20] N. SRNICEK, *Platform Capitalism*, Cambridge, Polity Press, 2016.

[21] A. COVERI - C. COZZA - D. GUARASCIO, *Monopoly Capital in the time of digital platforms: a radical approach to the Amazon case*, in *Cambridge Journal of Economics*, 46, 2022, 1341–1367 and M. R. ATAL - J. TAGGART - S. SCHINDLER, ET AL., *Oligarchic sovereignty: Technology and the future of global order*, in *Review of International Studies*, 52, 2026, no. 1, 1-23.

[22] L. TORCHIA, *Poteri pubblici e poteri privati nel mondo digitale*, in *il Mulino, Rivista trimestrale di cultura e di politica*, 2024, no. 1, 16.

[23] See A. VOLPI, *I padroni del mondo. Come i fondi finanziari stanno distruggendo il mercato e la democrazia*, Roma-Bari, Laterza Editori, 2024; F. OLIVERI, *Machina Mundi. Per una regolazione democratica dei poteri digitali*, Modena, Mucchi Editore, 2025 and Y. VAROUFAKIS, *Technofeudalism. What Killed Capitalism*, London, Bodley Head, 2023.

[24] P. STAAB – S. SIERON – D. PIÉTRON, *Counter-Hegemonic Neoliberalism: Making Sense of EU Platform Regulation*, in *Weizenbaum Journal of the Digital Society*, vol. 2, 2022, no. 1, 1-18.

neoliberal revolution. This has allowed major American platforms to grow and expand on a global scale[25].

This results in the subordination of public power to private power, which can turn into genuine forms of dependence. Indeed, large digital corporations not only have enormous economic and political power but also exercise unprecedented social power. They control the infrastructure through which indispensable services are provided - in the digital space and, increasingly, in the physical space as well. In other words, these economic powers are the primary providers of digital *Daseinsvorsorge* services.

In an increasingly digitized society, a greater proportion of social life takes place through digital platforms. These platforms offer direct access to goods and services, without the intermediation of traditional public or private structures. There are numerous examples: from search engines used to find information, urban transport services offered by Uber and Blablacar, to the progressive digitization of healthcare, which is increasingly relying on medical apps and computerized systems. And finally the 'platformization' of information, which now takes place on social media platforms that select and filter information in line with their own techno-commercial strategies. These platforms – and the digital space in

[25] In the United States, the first antitrust laws were introduced in the late 19th century, with the Sherman Act of 1890. In the 20th century, the American antitrust legal movement believed that antitrust legislation should prevent the concentration of capital to protect market competition, but above all to safeguard democracy itself. Excessive monopolistic concentration, indeed, would have allowed economic powers to influence the political sphere to secure legislation in their favor. And this would have undermined democratic autonomy. On this basis, the U.S. courts intervened on several occasions to break up industrial monopolies. The most famous cases, for example, involved the breakup of Standard Oil and American Telephone and Telegraph (AT&T).

The situation changed, however, with the economic and legal theories of the Chicago School. The criterion for evaluating the existence of monopolies was no longer to be based on political-democratic considerations, but on the parameter of consumer welfare. And such welfare is safeguarded when consumers are offered goods at a lower price, regardless of whether the market is competitive. According to Chicago legal scholars, the protection of competition at all costs, indeed, has paradoxical effects. It allows inefficient firms to survive and penalizes the larger, more efficient companies, which can capture greater market share and reducing prices thanks to economies of scale.

Antitrust laws designed to protect consumers would, paradoxically, end up damaging them. This is the antitrust paradox made famous by legal scholar Robert Bork. See R.H. BORK, *The Antitrust Paradox: A Policy at War with Itself*, New York, Free Press, 1978.

Since then, judges have repeatedly adopted the arguments set forth in *The Antitrust Paradox* and have 'frozen' antitrust rules, applying them only to cases of unjustified price increases. The result was that, by the early 2000s, most of the antitrust agenda had been swept away. F. OLIVERI*, Machina Mundi,* cit., 238.

The neoliberal interpretation of antitrust law, however, becomes paradoxical in turn within digital capitalism. Here, the new monopolies take on unprecedented characteristics. As Lina Khan has shown in *Amazon's Antitrust Paradox*, digital firms are inclined to keep prices as low as possible with the aim of creating economies of scale to eliminate competing firms. They are also willing to operate at a loss. According to neoliberal interpretations, market actors are rational agents focused on short-term profit. These interpretations therefore have difficulty explaining companies that prioritize increasing market share even at the cost of short-term returns. For these reasons, antitrust policies (interpreted in a neoliberal sense) have, according to Khan, proven ineffective in containing the rise of new digital monopolies. See L. M. KHAN, *Amazon's Antitrust Paradox*, in *The Yale Law Journal*, 126, 2017, 710–805.

general – have penetrated to the very 'heart' of society and now constitute the social infrastructure in which we live[26].

Seen in this light, antitrust policies alone are no longer sufficient to limit the influence of digital powers. The problem is no longer merely the protection of competition. The influence of these powers now extends much deeper into the structures of digital society, penetrating areas of life that concern social participation and the provision of essential services to the population. As mentioned, digital platforms have evolved into digital infrastructures for essential services of *Daseinsvorsorge*[27].

It is therefore not merely a matter of competition but an issue of infrastructure policy. The central issue lies in the fact that these powers control infrastructure and services that are essential to the existence of a community and can manage them in their own private interest. At the same time, public institutions risk developing a situation of dependence and subordination. They no longer have autonomous control over these services and must rely on external entities for their implementation.

This appears to reproduce the subordination of public institutions to the forces of technology and the market, as Forsthoff had already intuited. The consequences are significant for sovereignty and the autonomy of public institutions. Using Forsthoff's terminology, we can say that *Daseinsverantwortung* has shifted from public institutions to market forces, producing new forms of subordination of the public to the market.

However, this subordination does not manifest itself uniformly across all legal systems. Not all forms of sovereignty are equal. A distinction must be made between states characterized by 'strong sovereignty' and states endowed with 'weak or diminished sovereignty'. In states with 'strong sovereignty' - particularly the United States and China - the growth of digital powers is protected and encouraged by public institutions. This is because these powers are strategically utilized to pursue public ends, particularly geoeconomic and geopolitical ones[28]. Thus, there is no subordination of the public to the private sector. Rather, there is an interpenetration that, instead of weakening sovereignty,

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[26] J. VAN DIJCK - T. POELL - M. DE WAAL, *The Platform Society. Public Values in a Connective World*, Oxford, Oxford University Press, 2018.

[27] C. BUSCH, *Regulierung digitaler Plattformen als Infrastrukturen der Daseinsvorsorge*, Bonn, Friedrich-Ebert-Stiftung, 2021, 5.

[28] This trend became particularly evident in the United States after the September 11 terrorist attacks. As Shoshana Zuboff argues, U.S. security agencies used digital technologies to collect data on citizens deemed potentially dangerous and to monitor their behaviours. These reasons also contributed to the emergence and growth of Silicon Valley companies. S. ZUBOFF, *The Age of Surveillance Capitalism*, London, Profile Books, 2019.

But digital companies have also been employed in policing, border control, and, above all, military and geopolitical operations. Kate Crawford points out how the U.S. military has collaborated with digital companies to utilize their expertise for military purposes, particularly in the fields of artificial intelligence, machine learning, and drones. See K. CRAWFORD, *Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence*, New Haven, Yale University Press, 2021.

As for China, beginning in the early 2000s, the political leadership has gradually built its own data protection model. However, the Chinese government has also shown a growing willingness to exercise its regulatory powers to protect national security interests, which have gradually become more central. See R. CREEMERS, *China's emerging data protection framework,* in *Journal of Cybersecurity*, 2022, 1–12.

strengthens it. This intertwining - which we might define as a new 'military-technological complex'[29] - produces a genuine osmosis between digital powers and military and security apparatuses, using digital technology for geopolitical projection[30].

The situation is different for states that do not have digital corporations firmly established within their borders. They must rely on foreign economic powers that control the infrastructure essential to the functioning of society. These powers lie outside the perimeter of the state's legal system and, moreover, operate according to opaque commercial logics, as well as geoeconomic and geopolitical considerations. In our view, European states can also be included among these systems characterized by 'weak or diminished sovereignty'. It is true that, over the past decade, the European Union has promoted strong and intensive regulatory activity (for example, the *GDPR*, the *Digital Services Act*, the *Artificial Intelligence Act*, and the *Digital Markets Act*). However, this regulatory effort applies to companies that have no territorial roots on European soil. The European Union is seeking to steer technological development in which it is not a leading player and which, at least at present, it does not appear capable of governing[31].

It is therefore not surprising that the issue of digital sovereignty has become central to the European debate, particularly in terms of strategic autonomy[32]. An essential aspect of this autonomy lies in reducing dependence on private digital actors who own and control vital economic and social infrastructure. The goal is to regain effective decision-making autonomy regarding its own digital infrastructure and the industrial development of digital technology.

Seen in this light, the issue of digital *Daseinsvorsorge* also takes on significance. Ensuring control over physical infrastructure (submarine cables, data centers, decentralized physical infrastructure such as smartphones) and immaterial services (accessible through platforms) essential to participation in a complex digital society becomes particularly important. Recent years have seen the European Union focus significant efforts on developing autonomous digital infrastructure, particularly in the fields of data security and cloud computing. Next section will therefore analyze the European Gaia-X project, one of the most important European initiatives introduced by the EU in the field of cloud computing. This project

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[29] Our expression draws on the term 'military-industrial complex', coined by U.S. President Dwight D. Eisenhower in his Farewell Address on 17 January 1961.

On the military-technological complex, see A. ARESU, *Le potenze del capitalismo politico. Stati Uniti e Cina*, Milano, La Nave di Teseo, 2020 and C. MILLER, *Chip War: The Fight for the World's Most Critical Technology*, New York, Scribner, 2022.

[30] A. D'ATTORRE, *La sovranità digitale. Poteri privati, intervento pubblico e diritti individuali nel cyberspazio*, in T. CASADEI - S. PIETROPAOLI (eds.), *Diritto e tecnologie informatiche*, Milano, Wolters Kluwer, 2024.

[31] *Ibid.*

[32] On sovereignty, see D. GRIMM, *Sovereignty: The Origin and Future of a Political and Legal Concept*, New York, Columbia University Press, 2015.

On digital sovereignty, see J. POHLE - T. THIEL, *Digital Sovereignty*, in *Internet Policy Review*, 2020, no. 4, 1–19; G. FALKNER - S. HEIDEBRECHT - A. OBENDIEK - T. SEIDL, *Digital Sovereignty: Rhetoric and Reality*, in *Journal of European Public Policy*, vol. 31, 2024, no. 8, 2099–2120; L. FLORIDI, *The Fight for Digital Sovereignty: What It Is, and Why It Matters, Especially for the EU*, in *Philosophy & Technology*, vol. 33, 2020, 369–378.

represents an interesting case study for understanding European efforts as well as their limitations.

5. The Gaia-X Project as an Example of the Search for Digital Infrastructure Independence

The emergence of the issue of European digital sovereignty is closely linked to the growing awareness of the European Union's infrastructure dependence on non-European technology providers. In the previous chapter, we showed how large private platforms have become the main providers of digital *Daseinsvorsorge*; we will now analyze the European Union's attempt to regain a form of infrastructure autonomy. In this sense, the Gaia-X project represents the most significant case study.

The issue of European infrastructure autonomy gained increasing prominence in the late 2010s. A decisive turning point came with Edward Snowden's 2013 revelations about global surveillance practices conducted by U.S. intelligence agencies and their allies. These revelations definitively destroyed the illusion of a libertarian digital space free from power. They showed that even this space is subject to geopolitical pressures. The result was a clear loss of trust in the U.S. government and digital service providers[33].

Until then, EU digital policies had promoted liberalization and global trade. However, the emergence of new threats pushed the EU toward more restrictive legislation. It is within this context that the *GDPR* was introduced in 2016, followed by further regulatory measures to safeguard consumer rights and protect personal data[34]. But in addition to protecting citizens' rights, the EU has also directed its efforts toward strategic industrial development policies in the technology sector. The pursuit of European digital sovereignty takes place in this context. It is a response to cyber threats, cyberattacks, technological and commercial competition between the U.S. and China and dependence on foreign economic actors[35]. It is no coincidence that the EU's Digital Agenda 2020–2030 lists digital

[33] R. ADLER-NISSEN - K. A. EGGELING, *The Discursive Struggle for Digital Sovereignty: Security, Economy, Rights and the Cloud Project Gaia-X*, in *Journal of Common Market Studies*, 62, 2024, no. 4., 997.

[34] A. BRADFORD, *The Brussels Effect: How the European Union Rules the World*, New York, Oxford University Press USA, 2020.

[35] A critical paper on the use of digital threats in European politics: E. ORRÙ, *How the notion of "hybrid threat" is reshaping security. The case of migration and disinformation within the EU and its implications for the rule of law and democracy*, in *Rivista italiana di informatica e di diritto*, vol. 7, 2025, no. 2, 49-61.

sovereignty among its priorities[36]. The traditional vocabulary of growth and innovation is now accompanied by increasingly frequent references to protection and autonomy[37].

European countries have responded to geopolitical pressures and the challenges posed by large technology companies by pursuing the goal of greater digital autonomy, particularly in the form of infrastructure independence. The Gaia-X project is part of this effort.

Gaia-X is the main European initiative in collective cloud computing. The term 'cloud' refers to the technology that enables remote on-demand access to IT services[38]. More specifically, cloud computing is a model for delivering IT resources that enables network-based access to computing power, data storage, and software applications. These are hosted on remote infrastructure and managed by specialized providers. It relies on both intangible infrastructure for data management (e.g., software) and tangible infrastructure (e.g., hardware and servers), which are physically located and strategically important. The cloud is a rapidly expanding digital service. An ever-increasing number of companies and public administrations are migrating their infrastructure to the cloud. This is because it reduces operating costs, promotes service interoperability, and offers high standards of security and data storage capacity.

Its widespread adoption has transformed the cloud into an essential infrastructure: a digital *Daseinsvorsorge* upon which databases, artificial intelligence, public services, healthcare systems, scientific research and business applications rely. The fact that this infrastructure in Europe is controlled and provided by non-European companies - Amazon Web Services, Microsoft, and Google - raises significant questions about autonomy and compliance with the fundamental principles of the European Union. These companies operate in the European cloud market in an oligopolistic structure. In 2024, AWS, Microsoft Azure, and Google Cloud collectively held more than 70 percent of the European market, while European providers accounted for just 15 percent[39]. Concerns regarding competition are compounded by those related to data security and privacy. The consequences of the Snowden revelations have already been mentioned. Added to these are fears resulting from the enactment of the U.S. Cloud Act in 2018. This law requires all U.S. cloud providers to make data available to U.S. authorities, regardless of whether their data centers are located inside or outside the United States[40].

Given these considerations, it is not surprising that digital autonomy has become a priority in European policy. The creation of an autonomous cloud infrastructure is a step

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[36] EUROPEAN PARLIAMENT, *Digital agenda for Europe*, 2025. https://www.europarl.europa.eu/factsheets/it/sheet/64/digital-agenda-for-europe

[37] R. ADLER-NISSEN - K. A. EGGELING, *The Discursive Struggle for Digital Sovereignty*, cit., 997.

[38] A. BAUR, *European Dreams of the Cloud: Imagining Innovation and Political Control*, in *Geopolitics*, 29, 2024, n. 3, 797.

[39] G. BUTLER, *European cloud providers hold 15% of local market share. Synergy Research Share remains steady since 2022*, in *DCD*, July 27, 2025. https://www.datacenterdynamics.com/en/news/european-cloud-providers-hold-15-of-local-market-share-synergy-research

[40] A. BAUR, *European Dreams of the Cloud: Imagining Innovation and Political Control*, cit., 799.

About the Cloud Act «according to some, however, these fears are largely inflated or inaccurate. For example, it is argued that the CLOUD Act does not enable US surveillance in Europe, since the Act only applies to court authorised criminal investigations and does not provide the US government with any new authority to obtain content on national

in precisely this direction. It reduces dependence on foreign hyperscalers, which may not align with European data protection standards.

Initially, various European countries attempted to build their own cloud infrastructure individually. Notable examples of these efforts include the *Bundescloud* in Germany and *Andromède* in France. However, these initiatives did not produce particularly significant results[41]. Gaia-X was created specifically to overcome the limitations of national projects. As stated in the official documentation:

> Gaia-X offers a neutral global digital ecosystem where consumers and providers can conduct business in a trusted, transparent, and secure environment. It provides a competitive alternative to proprietary platforms that impose vendor lock-in and operate in opaque environments regarding data privacy, extraterritorial laws, and security[42].

The project's goal is therefore to

> enhance Europe's digital independence by creating a trusted data ecosystem that supports innovation, competitiveness, and the responsible use of data. By doing so, it ensures that European businesses and individuals retain control over their digital assets[43].

However, Gaia-X does not aim to offer its own cloud services, but rather a federated 'infrastructure', an 'ecosystem' for data sharing that complies with European principles. To use a metaphor, if the initiatives of individual Member States and the cloud products of commercial providers are cars, Gaia-X is the road on which they travel[44]. As stated in the Gaia-X Architecture Document:

> Gaia-X aims to create a federated open data infrastructure based on European values regarding data and cloud sovereignty. The mission of Gaia-X is to design and implement a data-sharing architecture consisting of common standards for data sharing, best practices, tools, and governance mechanisms. It also constitutes an EU-anchored federation of cloud infrastructure and data services, to which all 27 EU member states have committed themselves[45].

Launched in 2019 on the initiative of German Minister for Economic Affairs and Energy Peter Altmaier, the Gaia-X project quickly garnered positive feedback. European companies and countries were gradually invited to participate in the project. In February

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security grounds. To address potential conflicts of law between the CLOUD Act and the GDPR, the EU has already entered formal negotiations with the United States to discuss an electronic evidence sharing agreement. It is also argued that European concerns around US extra-territorial legislation are unfairly one-sided, since the EU itself disposes of legal instruments similar to the CLOUD Act to obtain data regardless of their location». F.G. BLANCATO, *The cloud sovereignty nexus: How the European Union seeks to reverse strategic dependencies in its digital ecosystem*, in *Policy and Internet*, vol. 12, 2024, 21.

[41] R. ADLER-NISSEN, K.A. EGGELING, *The Discursive Struggle for Digital Sovereignty*, cit., 997.

[42] GAIA-X, *Your Key to Data Sovereignty*, Gaia-X Overview Brochure, 2025. https://gaia-x.eu/wp-content/uploads/2025/01/Gaia-X-Brochure_Overview-2025.pdf

[43] GAIA-X, *Official site*, Version dated July 7, 2026. https://web.archive.org/web/20260707054612/https://gaia-x.eu/

[44] R. ADLER-NISSEN, K.A. EGGELING, *The Discursive Struggle for Digital Sovereignty: Security, Economy, Rights and the Cloud Project Gaia-X*, cit., 998.

[45] GAIA-X, *Gaia-X Architecture Document*, 2021. https://docs.gaia-x.eu/technical-committee/architecture-document/21.09/overview/

2020, French political and business leaders were brought on board, and in June, the initiative received funding from Brussels. The project was also included both in the German Council Presidency's 2020 agenda focused on digitalization and in the European Commission's narrative on data autonomy[46].

However, difficulties within the project quickly emerged. The main obstacle came from the inclusion of large foreign companies - particularly those from the United States and China - including Microsoft, Google, Amazon, Palantir, Huawei, and Alibaba [47]. Paradoxically, a project created to reduce Europe's dependence on foreign hyperscalers ended up involving the very players it had sought to break free from. This caused strong criticism from other project participants, particularly because these companies operate under legal systems with data protection approaches that differ from those of the EU. These non-EU cloud service providers were viewed as a potential «'trojan horse' to maintain their dominance in the European cloud market by influencing its standards and technical specifications»[48].

To avoid the risk of excessive influence by these operators, Gaia-X has introduced certain safeguards. The voting rights of non-European companies have been limited. Furthermore, the governance board was reserved exclusively for European companies[49]. However, these measures have not completely resolved concerns. Scaleway, a French cloud provider, for example, decided to leave the project, believing that opening it up to foreign companies would make the goal of strengthening the European cloud market unachievable[50]. But the EU itself, having acknowledged Gaia-X's inability to achieve its stated objectives, has gradually shifted its focus to new projects aimed at supporting the competitiveness of European cloud solutions and achieving greater digital autonomy. Notable among these are the *Important Projects of Common European Interest* (IPCEI) and the *European Alliance for Industrial Data, Edge, and Cloud*.

The Gaia-X experience reflects a broader divergence of views on how to achieve European digital independence: whether by reducing dependence on foreign actors or through integration into global markets. This divide runs through the EU Member States themselves. Some Member States, particularly those more aligned with the Atlantic alliance - such as Sweden and Denmark - believe that digital security depends above all on cooperation with strategic allies and on the continued flow of data between Europe and the U.S. Seen in this light, an exclusively European cloud infrastructure would risk undermining that cooperation[51]. However, this common infrastructure project also clashes with globalist market-oriented interpretations. Such approaches favor competition and oppose policies

[46] R. ADLER-NISSEN, K.A. EGGELING, *The Discursive Struggle for Digital Sovereignty*, cit., 997-998.

[47] C. GOUJARD - L. CERULUS, *Inside Gaia-X: How chaos and infighting are killing Europe's grand cloud project. The initiative, meant to boost Europe's cloud services, is failing to fix the problems it was intended to solve*, in *Politico*, October 26, 2021. https://www.politico.eu/article/chaos-and-infighting-are-killing-europes-grand-cloud-project/

[48] F.G. BLANCATO, *The cloud sovereignty nexus,* cit., 26.

[49] *Ibid.*

[50] R. ADLER-NISSEN - K.A. EGGELING, *The Discursive Struggle for Digital Sovereignty*, cit., 1002.

[51] *Ibid.*, 1000.

perceived as forms of economic protectionism. According to this view, Gaia-X would increase bureaucratic costs and further limit market freedom[52]. It is within this context that the decision to involve foreign technology companies in the construction of a European digital-industrial space should be understood.

The challenges faced by the Gaia-X project are thus part of an ongoing debate within the EU, between the pursuit of greater strategic autonomy - driven by new geopolitical challenges - and the desire to continue defending an open global economy. It is no surprise, then, that European technology policy has been described as a form of «superficial geopoliticization»[53], that is, a pursuit of strategic autonomy that is more rhetorical than substantive. The EU thus still appears to be caught in the middle.

However, the key issue of delegating essential infrastructure and services to external private actors remains unresolved. The central issue remains the political autonomy necessary to exercise truly effective democratic governance. In other words, the ability to direct public policies toward democratic, social and ecological goals, rather than toward objectives set by Big Tech. The risk is that democracies will bow to platforms designed elsewhere, instead of putting technology at the service of democratically chosen goals.

6. Conclusions

This paper reconstructs Ernst Forsthoff's concept of *Daseinsvorsorge*. In Forsthoff's account, *Daseinsvorsorge* refers to the services and infrastructure essential for the survival of individuals and for their participation in the life of a technologically advanced society. However, the concept of *Daseinsvorsorge* is not merely a technical, but also a political one. It draws attention to the entities responsible for providing essential services and, consequently, to the power relations that arise from this function.

Daseinsvorsorge can be provided by both public authorities and private operators. The problem arises when the latter, thanks to their economic and technological power, acquire a degree of autonomy that allows them to evade political direction and democratic oversight. In such circumstances, there is a risk that the public will become dependent on the private sector. Essential infrastructure and services are provided by private providers that are accountable only to themselves. They are not directly accountable to the political community for their decisions.

It is this dynamic that characterizes the digital ecosystem. Technological infrastructures and digital services represent a new form of *Daseinsvorsorge*, as they constitute the indispensable prerequisite for exercising rights and participating in social life in contemporary society. However, digital *Daseinsvorsorge* is controlled by large private

[52] *Ibid.*, 1002-1003.

[53] *Ibid.*, 1006.

operators with unprecedented economic and infrastructural power[54]. In European legal systems, this creates new forms of infrastructural dependence. New European projects, such as Gaia-X, reflect this growing awareness and are aimed at increasing Europe's infrastructural autonomy. However, they do not yet appear to have significantly overcome dependence on major global digital infrastructures. The pursuit of effective infrastructural autonomy therefore remains a central challenge for European states[55].

Technological infrastructure is the arena where power is codified and political choices become technical constraints. But before becoming technical constraints, they were political decisions, later crystallized into infrastructure. In this era of rapid transformation, it is therefore essential to make choices that preserve spaces of democratic autonomy, before these choices are delegated to opaque entities and result in infrastructure that is hard to reverse. The issue of digital *Daseinsvorsorge* thus demonstrates that control over technological infrastructure is not merely a technical or economic problem, but a matter of autonomy that lies at the heart of democracy.

It is significant that, while this article is being concluded, the European Commission has proposed a new package to strengthen European digital autonomy[56]. Whether these measures will successfully translate Europe's pursuit of democratic autonomy into practice or remain largely declaratory is a question that only their concrete implementation can clarify.

[54] M. FRAPPORTI, *Il potere delle piattaforme come infrastrutture. Tecnica, estetica, egemonia*, in *Scienza e Politica*, vol. XXXV, 2023, no. 69, 35-51.

[55] F. BRIA, *Reclaiming Europe's Digital Sovereignty*, in *NOEMA*, 2 October 2025. https://www.noemamag.com/reclaiming-europes-digital-sovereignty

[56] EUROPEAN COMMISSION, *Commission proposes tech sovereignty package to strengthen Europe's digital autonomy and resilience*, 2026. https://digital-strategy.ec.europa.eu/en/news/commission-proposes-tech-sovereignty-package-strengthen-europes-digital-autonomy-and-resilience