

The Emersion of Digital Intangible Goods in the Light of European Private Law: a taxonomy proposal

L'emersione dei beni immateriali digitali alla luce del diritto private europeo: una proposta di tassonomia

GIOVANNI MARIA TOSI
Cultore della materia di Diritto Privato
Università degli Studi di Milano

Abstract

The study explores some examples of new digital goods in the light of the recent EU legislation on the contracts for the supply of digital content and digital services, including information and personal data, as well as a tentative taxonomy of new immaterial digital goods. The multitude of new digital goods due to technological progress and the fragmented regulatory framework could be brought to unity constructing a taxonomy of new digital goods that takes into account the differences between them and the need to overcome the dogma of dominical logic.

Lo studio esplora alcuni esempi di nuovi beni digitali alla luce della recente normativa europea sui contratti di fornitura di contenuti digitali e servizi digitali, comprese le informazioni e i dati personali, offrendo una proposta di tassonomia dei nuovi beni digitali immateriali. La sviluppo di nuovi beni digitali dovuto al progresso tecnologico e alla frammentazione del quadro normativo può essere ricondotta a unità costruendo una tassonomia dei nuovi beni digitali che tenga in considerazione le differenze tra loro e il bisogno di superare il dogma della logica dominicale.

Keywords: digital goods; information; personal data; GDPR.

Summary: 1. Introduction. – 2. The new digital intangible goods. – 3. The information. – 4. Personal data. – 5. Taxonomy of new digital goods in the light of European private law. – 6. Conclusion.

1. Introduction.

Since time immemorial in the Western legal tradition, law has been concerned with the relationship between man and things in order to achieve the best allocation of resources. Such allocation is traditionally disciplined by the property rules.¹

Legal scholars framed as “new properties” new forms of wealth, which should be protected by property rules too, but in fact can’t be fully treated as such. The expression “new properties” highlight the transition from use-value to exchange-value and the profound connection, which is more and more evident, between property and the private individual with their qualities and aptitudes.²

Throughout history, mankind has constantly created new goods. The causes of the creation of new goods include economic processes (like the tertiarization and financialization of the economy), technological developments (for example the datafication³), and the changed perspective about certain *res extra commercium* (reification of *res communes omnium* and commodification of the human body and aspects of personality).

Thus, the term “new properties” does not constitute an autonomous and homogeneous category, but rather it is used to represent exclusive resources whose transfer is permitted by special rules (e.g. milk quotas) or resources dependent on administrative concessions; sometimes again, “new properties” refers to exclusive and intangible resources that are legally protected and can be transferred contractually (e.g. rights over radio frequencies) and in general all resources related to the dissemination of information.

All these resources have in common the characteristic of intangibility.⁴

According to French doctrine, a distinction can be made between abstract and concrete new goods. Among the former are future things, building rights, information and aggregates of things (*universitas rerum*), among the latter are energies, the environment and culture, and the elements and products of the human body.⁵

Today, in particular, we are witnessing the emersion of new digital goods. It

¹ The distinction between property rules and liability rules is taken from: G Calabresi, AD Melamed, ‘Property Rules, Liability Rules and Inalienability: One View of the Cathedral’ (1972) 85(6) HLR, 1089 ff.

² On the expression “new properties” see: CA Reich, ‘The New Property’ (1964) 73(5) YLJ, 733 ff.; A Zoppini, ‘Le «nuove proprietà» nella trasmissione ereditaria della ricchezza (note a margine della teoria dei beni)’ [2000] Riv. dir. civ., 185-248; A Zoppini, ‘L’informazione come bene’, in M D’Auria (ed.), *I problemi dell’informazione nel diritto civile, oggi. Studi in onore di Vincenzo Cuffaro* (Roma Tre-Press, 2022), 72 ff.;

³ On datafication and digitisation see: A Busacca, *I beni digitali nella tassonomia dei beni giuridici* (Cacucci editore 2023), 11.

⁴ M Colangelo, *Creating property rights. Law and Regulation of Secondary Trading in the European Union* (Martinus Nijhoff Publishers 2012), 180.

⁵ S Normand, ‘Les nouveaux biens’ (2004) 106(2) Revue du notariat, 177-204.

has been estimated that the value of intangible assets accounts for about 90% of the total capitalization of the stocks belonging to the S&P 500 index, the main corporate benchmark for Wall Street listed stocks.⁶

Indeed, in the most technologically advanced sectors, the intangible aspect of the product becomes prevalent and it is therefore at the centre of legal issues.

Within cyberspace⁷, numerous relevant facts and acts take place, in particular: the processing of personal data, the circulation of digital content and goods with digital elements, and the exploitation of personality attributes such as name and image. We are thus witnessing the emersion of forms of wealth characterized by intangibility, the inadequacy of traditional rights *in rem* as a criterion for the legal classification of resources, the greater importance assigned to exchange-value than use-value, the mobilization of wealth and the overcoming of indifference towards *res communes omnium*, such as information.⁸

On the other hand, the European Union aims at creating and developing the Digital Single Market, an economic and legal system centred on intangible property and contractual circulation.

2. The new digital intangible goods.

At the level of European law, both the EU and the ECHR have intervened on the subject of property.

As far as the EU is concerned, the notion of legal goods can only be reconstructed by recomposing normative fragments that follow a functional approach.

On the one hand, one must consider the notion of goods, enshrined in the TFEU (art 26 ff.). According to CJEU jurisprudence, goods are 'products which can be valued in money and which are capable, as such, of forming the subject of commercial transactions'.⁹ These also include waste and electronic games.¹⁰

On the other hand, Directive 2006/112 art 15, which regulates the common system of value added tax, assimilates energies and rights to tangible goods. A combined reading of art. 14(1) and 15(2)(b), for example, would sound like this: «the transfer of the right to dispose of rights *in rem*, giving the holder thereof a right of use over immovable property, shall constitute a supply of goods».

Ostensibly, the VAT directive rejects the possibility that someone could have the power to dispose of any intangible good as owner, but this would conflict with other EU rules that provide for the creation of exclusive rights over intangible goods (e.g. emission allowances) in the hands of a person and with

⁶ Ocean Tomo, '[Intangible Asset Market Value Study](#)' (2022).

⁷ "Cyberspace" is a neologism coined by W Gibson in his novel *Neuromancer*; "Infosphere" is another neologism popularised by L Floridi, see e.g. *La quarta rivoluzione. Come l'infosfera sta trasformando il mondo* (Raffaello Cortina ed. 2017); "Metaverse" was coined instead by N Stephenson in his novel *Snow Crash*.

⁸ A Zoppini, 'Le «nuove proprietà» nella trasmissione ereditaria della ricchezza (note a margine della teoria dei beni)' (2000) 46(1) Riv. dir. civ., 185-248.

⁹ Judgement of 10 december 1968, *Commission v Italian Republic*, C-7/68, EU:C:1968:51, paragraph B(1), 428.

¹⁰ Judgement of 9 july 1992, *Commission v Kingdom of Belgium*, C-2/90, EU:C:1992:310; Judgement of 26 october 2006, *Commission v Hellenic Republic*, C-65/05, EU:C:2006:673.

the domestic rules of some member states.¹¹

EU legislation is also at the heart of the debate on the so-called new properties (milk quotas, greenhouse gas emission quotas, etc.).

Finally, there are two relevant EU Directives: Directive 2019/770 on digital content and services – transposed by Italy with Legislative Decree 173 of the 4th November 2021 –, which defines ‘digital content’, ‘digital service’ and ‘good with digital elements’ and Directive 2019/771 on the sale of goods, which gives a definition of ‘good’.

Digital content is defined as "data produced and supplied in digital format" (e.g. text, audio, image or video documents).¹²

Digital services, on the other hand, are those services that enable the user to create, transform, store or access the data in digital format (art 2(1)(2)(a)) and those services that allow them to be shared in digital format (art 2(1)(2)(b)). A digital service is therefore always understood to be a digital resource (software), which, however, is not transferred but given for use through a license. Digital services also can be qualified as goods in the legal sense.

A good with digital elements, on the other hand, is a tangible movable good that incorporates or is interconnected with digital content or a digital service, without which it could not function.

The connection can be traced neither to the scheme of the composite thing nor to that of appurtenance or *universitas*.

Directive 2019/771 does not apply to ‘any tangible medium which serves exclusively as a carrier for digital content’ (art 3(4)(a)); such tangible media fall within the scope of Directive 2019/770 (art 3(3)).

Some argue that the European legislator constructs two different contractual regimes: a regime of the sale of goods, also with digital elements, and a regime of the provision of digital content and digital services, which is intersected with the regulation of intellectual property.

In ECHR law there is no definition of property in the legal sense but of ‘possession’, which is sometimes confused with that of interest.

Since the *Sporrong and Lönnroth v Sweden* case, it has been established that ECHR Protocol 1 art 1 contains three norms¹³: the first establishes the right to have their possessions respected; the second provides that deprivation of property may take place only in the public interest and under the conditions

¹¹ E Ramaekers, ‘Classification of Objects by the European Court of Justice: Movable Immovables and Tangible Intangibles’ (2014) 4 ELRev, 447-469.

¹² A De Franceschi, *La vendita di beni con elementi digitali* (ESI 2019), 37 ‘Ai fini di un inquadramento sistematico della categoria dei contenuti digitali, si può configurare una serie di caratteristiche in considerazione dei seguenti aspetti: essi consistono in una raccolta di dati accessibili in via digitale; sono tendenzialmente neutrali rispetto al mezzo utilizzato per trasmetterli; presentano una sensibile differenza tra costi di produzione e costi di diffusione; sono tendenzialmente inconsumabili; sono beni le cui qualità possono essere percepite solo mediante il loro utilizzo; a discrezione dell’autore, possono essere modificati successivamente alla loro creazione; consentono una differenziazione del prodotto e del prezzo, pur a fronte di una struttura tendenzialmente simile; rendono possibili plurimi collegamenti con altri contenuti digitali o beni fisici’.

¹³ Convention for the Protection of Human Rights and Fundamental Freedoms (European Convention on Human Rights, as amended) (ECHR) Protocol 1 art 1(1-2) ‘Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law. The preceding provisions shall not, however, in any way impair the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or to secure the payment of taxes or other contributions or penalties’.

prescribed by law; the third grants the State the power to regulate the use of property in accordance with the general interest.¹⁴

According to the guidance prepared by the Court¹⁵, the notion of 'possession' extends not only to existing possessions but also to goods to which the applicant has a legitimate expectation. The notion of 'possession' thus includes immovable property, movable property and other proprietary interests. The notion of possession is autonomous from national provisions.

Some have, however, noted that the approach followed by the ECHR ultimately results in constraining economic policy-making, given that the conformity power of the legislators and governments of the Member States is stripped of the discretion necessary to implement policy choices.¹⁶

Digital content in the sharing society is perhaps the most emblematic expression of the evolution of the concept of intangible goods in the digital context, necessarily moving beyond the logic of individual ownership toward sharing economy based on contractual non-exclusive rights of use.

3. The information.

First of all, it is not still clear whether information is a good at all.

Legal scholars tried to find the rules governing information.

According to the traditional thesis, even though information is sometimes endowed with a considerable patrimonial value, it does not define a good in the legal sense, because information is non-rivalrous and non-excludable, while goods are typically susceptible of autonomous appropriation.¹⁷

Thus, information was initially brought back to the list of public goods (in the economic sense), i.e. those goods characterized by free accessibility, intrinsic indivisibility and transactional indivisibility.¹⁸

Others tried to define information as a type of energy, but the scientific consensus points in another direction.¹⁹

On the other hand, others have shown that the development of technology has made information a rival resource.²⁰

Moreover, according to the thesis of those who hold that goods in the legal

¹⁴ C Angiolini, *Lo statuto*, 49.

¹⁵ European Court of Human Rights, *Guide on Article 1 of Protocol No. 1 to the European Convention on Human Rights* (2023), 7 ff.

¹⁶ A Gambaro, 'Consonanze e dissonanze nelle fonti dell'istituzione proprietaria' (2016) 4 *Jus civile*, 281-294.

¹⁷ A Zoppini, 'L'informazione come bene', 70; see also N Mallet-Poujol, 'Appropriation de l'information: l'éternelle chimère' [1997] *Recueil Dalloz* 'Cette récusation de tout droit de propriété sur l'information invite à revivifier le concept d'usage d'une chose hors commerce parce que non appropriable ou indisponible'; V Zeno-Zencovich, 'Cosa', *Digesto civ.* (1989) para 13 'si deve concludere che manca nel nostro ordinamento positivo una norma o un principio generale che consentano ad un soggetto di affermare un proprio diritto esclusivo su "ogni messaggio comunicabile ad altri attraverso un mezzo qualsiasi", anche quando egli ne sia l'autore'; Zeno-Zencovich recognizes that the information can become the point of reference for interest, but excludes that it can rise to the status of a good.

¹⁸ A Busacca, *I beni digitali*, 47 ff.; for a brief overview of the issue from the perspective of the economic analysis of law see R Pardolesi, C. Motti, '«L'idea è mia!»: lusinghe e misfatti dell'economics of information' (1990) 6 *Dir. inf. e informatica*, 345-359.

¹⁹ MM Vopson, 'The mass-energy-information equivalence principle' (2019) 9(9) *AIP Advances*; M Burgin, R Mikkilineni, 'Is Information Physical and Does It Have Mass?' (2022) 13(11) *Information*, 540.

²⁰ N Purtova, 'The illusion of personal data as no one's property' (2015) 7(1) *Law, Innovation and Technology*, 83-111.

sense can be deemed so even in the absence of an exclusive right attributed by the legal system, information, even if it is only indirectly protected, cannot be excluded from being configured as a good in the legal sense.²¹

According to this doctrine, in fact, the theory of goods is a theory of subjective relations and, therefore, the legal good must be understood in a broad sense.²²

For instance, non-patentable information can also be qualified as a good in the legal sense if it can be objectified in contexts where it provides a legally relevant utility, especially in relation to activities that can be evaluated in terms of patrimonial value.²³

It should be added that information is neutral. Information, understood as a multi-valued and multi-subjective good, is treated uniformly from a technical perspective, but, from a legal standpoint, the interests at stake, when remedies are administered, are diverse and often diverge from the traditional frameworks for evaluating and/or balancing interests and predefined legal situations, prompting their reinterpretation and revision.²⁴

Thus, in order to ascertain whether there are legal positions that have information as their object and whether it can become the object of legal transactions, it is necessary to adopt the framework identified by recent scholarship, drawing on studies in semiotics²⁵ and computer science²⁶, which divides information into three categories: the content (semantic level), the symbol (syntactic level) and the physical medium (physical or structural level).²⁷

²¹ P Perlingieri, 'L'informazione come bene' [1990] *Rass. dir. civ.*, 348 'Quando l'informazione è suscettibile di soddisfare interessi meritevoli giuridicamente rilevanti essa rappresenta un bene anche in senso giuridico, diversamente non v'è alcuna ragione per proteggerla. Tuttavia, occorre precisare che la rilevanza giuridica dell'informazione non si esaurisce nella disciplina delle privative né è esclusivamente patrimoniale'.

²² A Rahmatian, 'Debts, Money, Intellectual Property, Data and the Concept of Dematerialised Property' (2020) 11(2) *JIPITEC*, 188; S Pugliatti, 'Beni (teoria generale)', *Enc. dir.* (1959) vol 5, para 9, 170 'Qui dobbiamo limitarci a dare notizia di quella vasta corrente dottrinale, secondo la quale la tutela giuridica che dà vita a "*Rechtsgüter*" non dà luogo sempre e necessariamente a diritti soggettivi. Ciò significa che, per quanto frequentemente la tutela giuridica produca – sotto il profilo oggettivo – un "*Rechtsgut*", e – sotto il profilo soggettivo – un diritto subbiiettivo, si danno non poche ipotesi nelle quali si realizza il primo risultato, ma non il secondo'; see also A Busacca, *I beni digitali*, 52.

²³ P Perlingieri, 'L'informazione come bene', 338; C Godt and others, *Boundaries of Information Property* (Intersentia 2022), 17 'The reports reveal the outstanding relevance of contract law. Many reports argue their national responses in contractual terms. The reports unearth how contracts can translate evolving IP boundaries and shifted values'.

²⁴ G Giannone Codiglione, *Internet e tutele di diritto civile. Dati - Persona - Mercato: un'analisi comparata* (Giappichelli 2020), 29.

²⁵ E Betti, *Teoria generale dell'interpretazione* (Giuffrè 1955), 108 'Rispetto a oggettivazioni del pensiero fissate in testi scritti o scolpiti si pone all'interprete il triplice compito di distinguere: (1) il segno materiale o strumento della forma rappresentativa: la scrittura o l'epigrafe; (2) la forma rappresentativa in sé stessa: p. es. l'immagine verbale, acustica o sonora, il linguaggio o il simbolo significante; (3) il contenuto rappresentato, ossia il senso o il pensiero espresso nel linguaggio, o significato nel simbolo'.

²⁶ R McClamrock, 'Marr's Three Levels: A Re-evaluation' (1991) 1 *Minds and Machines*.

²⁷ Y Benkler, 'From Consumers to Users: Shifting the Deeper Structures of Regulation' (2000) 52(3) *FCLJ*, 562 'These (regulatory *author's note*) choices occur at all levels of the information environment: the physical infrastructure – layer-wires, cable, radio frequency spectrum – the logical infrastructure layer – software – and the content layer'; L Lessig, *The Future of Ideas, The Fate of the Commons in a Connected World* (Random House 2002), 23 'At the bottom is a "physical" layer, across which communication travels. This is the computer, or wires, that link computers on the Internet. In the middle is a "logical" or "code" layer – the code that makes the hardware run. Here we might include the protocols that define the Internet and the software upon which those protocols run. At the top is a "content" layer – the actual stuff that gets said or transmitted across these wires. Here we include digital images, texts, on-line movies, and the like. These three layers function together to define any particular communications

According to other studies, information would be the object of acts of disposition equivalent to those that can be performed on corporeal things: access to the information (*usus*)²⁸, the use of the information (*usus fructus*) and the destruction of the information (*abusus*). Access to and use of information normally coincide, but there are cases where this is not the case; for example, patents restrict the use of information without restricting access to it, whereas copyright restricts the use of information by restricting access to it.

Information may concern physical persons or objects.

Among information on objects, a distinction can be made between non-personal data and synthetic data. These types of information exhibit distinct traits within the data market, and, despite differing in modalities and rules of circulation, may converge in collections that are then subject to processing activities aimed at the creation of organized datasets and training datasets.²⁹

Each type of data possesses a use value, which varies depending on how it is exploited and/or who holds exclusively or shared control over it. Additionally, it has an exchange value established by its position in the market either as a single economic good or as a part of a collection of goods (*universitas*).³⁰

Information concerning natural persons, if it is able to identify them or make them identifiable directly or indirectly, is qualified as personal data. On the other hand, information at the semantic level concerning objects is, for example, industrial inventions, which are patentable if they meet the requirements of novelty, inventive step, industrial applicability, and lawfulness.

If it does not meet the legal requirements for patentability, semantic information may be protected indirectly as a reflection of the specific case of protection of the secret.³¹

When speaking of the secrecy regime, reference is made to the discipline of trade secrets which encompasses business information and technical-industrial know-how, including commercial information, that is under the legitimate control of its owner.³²

Defining secret information as a form of industrial property, even though it constitutes an untitled right, does not automatically imply that this right can be classified as proprietary or *in rem*. This is because the legal protection afforded to such secret information does not focus on the tangible or intangible goods themselves. Instead, it centres on preventing the unauthorized disclosure, acquisition, or improper use of the information. The protection aims to safeguard the information against actions that violate the rights of its legitimate owner, rather than conferring absolute ownership over the underlying data or goods.³³

system'; H Zech, 'Information as Property' (2015) 6(3) JIPITEC, 192-197; H Zech, 'Data as a Tradeable Commodity', in A De Franceschi (ed.), *European Contract Law and the Digital Single Market. The Implications of the Digital Revolution* (Intersentia 2016), 53-79.

²⁸ See D Poletti, 'Holding Data between *possessio* and *detentio*', in T Pertot (ed.), *Rechte an Daten* (Mohr Siebeck 2020), 127-143.

²⁹ A Busacca, *I beni digitali*, 117.

³⁰ G Giannone Codiglione, *Internet e tutele di diritto civile*, 162.

³¹ A Ottolia, *Big Data e innovazione computazionale* (Giappichelli 2017), 43; ML Montagnani, 'Dati e proprietà intellettuale in Europa: dalla «proprietà» all'«accesso»' (2020) 1 Dir. economia, 539-569.

³² G Sena, 'Sulla disciplina dei segreti commerciali (già informazioni segrete): cenni all'evoluzione dell'istituto' (2022) 4-5-6 Riv. dir. industriale, 135.

³³ *ibid* 138.

The exclusivity of the information thus obtained is thus not a situation protected by an exclusive right, but a *de facto* situation deriving from the secrecy regime.

However, some argue that the establishment of an exclusive right on information could help regulate its circulation by moving beyond mere protection through secrecy and instead promoting broader and more structured data sharing.³⁴

Others argue that introducing an exclusive right on data would violate the *numerus clausus* principle, but according to them this principle should be interpreted flexibly.³⁵

Lastly, others contend that the introduction of a new exclusive right on information would not be justified, because data production, – unlike the entities traditionally protected by intellectual property –, arises from natural phenomena or human actions that occur independently of exclusive rights.³⁶ Moreover, they argue that the shrinking of the spaces of free appropriation through such new exclusive rights would not be compensated by any significant improvement in the ease of negotiated data exchange compared to the existing framework.³⁷

4. The personal data

This is the background to the debate on personal data, which by nature stand at the crossroads between subject and object.³⁸

On the one hand, in fact, personal data coincide with those immaterial attributes protected by personality rights; on the other, their circulation is the object of numerous European Union's regulations aimed at shaping and promoting the development of the Digital Market.³⁹

Personal data are governed first and foremost by Reg 2016/679, which sets out the rules for their processing: collection, organization, structuring, storage, modification, extraction, use and communication by transmission and dissemination. The Regulation was created to protect the privacy of citizens (CFREU art 7 and 8).

General Data Protection Regulation (GDPR) art 4(1) defines personal data as 'any information relating to an identified or identifiable natural person (data subject)'; identifiable by means of an illustrative list of identifying data: name, identification number, location, online identifier, characteristic elements of their physical, physiological, genetic, psychic, economic, cultural or social

³⁴ A Ottolia, *Big Data e innovazione computazionale*, 158.

³⁵ F Szilágyi, 'The necessity of data allocation: A plea for a private law (property law) perspective' (2021) 10(2-3) EPLJ, 180-240.

³⁶ A Ottolia, *Big Data e innovazione computazionale*, 161.

³⁷ *ibid* 162.

³⁸ C Angiolini, *Lo statuto dei dati personali. Uno studio a partire dalla nozione di bene* (Giappichelli 2020), 1.

³⁹ G Alpa, 'La «proprietà» dei dati personali', in M D'Auria (ed.), *I problemi dell'informazione nel diritto civile, oggi. Studi in onore di Vincenzo Cuffaro* (Roma Tre-Press 2022), 21; about the digital market see V Zeno-Zencovich, 'Dati, grandi dati, dati granulari e la nuova epistemologia del giurista' (2018) 2 Media Laws, 35 'Quello dei dati diventa uno, fra i tanti, "mercati regolamentati" cui è preposta una autorità e che opera secondo logiche di sistema. D'altronde, considerata la dimensione della "datasfera", è difficile immaginare che possa avvenire diversamente: la similitudine va al rapporto fra tutela privatistica della proprietà delle immissioni e disciplina pubblicistica dell'ambiente e di contrasto all'inquinamento'.

identity.⁴⁰

More on the political than on the regulatory level, it should be noted that the European Commission expressly stated that 'privacy is not a commodity to be traded'.⁴¹

European legislation, however, now explicitly recognizes the exchange of services against personal data.⁴²

Some argue that personal data qualify as legal goods, since they are separated from the data subject and objectified through the activities of data collection and storage. Furthermore, referring to the notion of goods would make it possible to make explicit the operation whereby the data controller and processor of the person's data exercise power over the medium represented by the personal data, from which an economic utility is derived.⁴³

The issue has serious implications, especially in the health sector, given that recent years have intensified concerns about health data management. The circulation of medical information now involves delicate considerations of public protection, scientific research, and potential risks. Specifically, there is growing awareness about the vulnerabilities of health data, including the potential for unauthorized manipulation, fraudulent use, or inappropriate commercial exploitation. The core tension lies in balancing the needs of public health and scientific progress with robust safeguards that prevent the misuse of sensitive information, ensuring that health data remains a resource for collective benefit rather than becoming a commodity for narrow economic interests.⁴⁴

It is significant in this respect that the confiscation of illegally constituted databases has been ordered for the first time.⁴⁵

To address the issue of personal data ownership, some have proposed a new taxonomy that classifies data on the basis of the gradation of rights over them.

This gradation is based on the relationship between the data and the private individual: strong, intermediate and weak. Consumers, according to this taxonomy, would have quasi-proprietary rights over the data of the first category, 'shared' quasi-proprietary rights over data in the second, and specific information rights in the third. This taxonomy would have the merit, according to the author, of distinguishing between data protection rights and general consumer protection rights.⁴⁶

⁴⁰ A Busacca, *I beni digitali*, 130.

⁴¹ Commission, 'Exchanging and Protecting Personal Data in a Globalised World' (Communication) COM (2017) 7 final, para 3.

⁴² Directive (EU) 2019/770 of the European Parliament and of the Council of 20 May 2019 on certain aspects concerning contracts for the supply of digital content and digital services [2019] OJ L136/1 art 3(1) 'This Directive shall also apply where the trader supplies or undertakes to supply digital content or a digital service to the consumer, and the consumer provides or undertakes to provide personal data to the trader, except where the personal data provided by the consumer are exclusively processed by the trader for the purpose of supplying the digital content or digital service in accordance with this Directive or for allowing the trader to comply with legal requirements to which the trader is subject, and the trader does not process those data for any other purpose'; see also Italian Consumer Code art 135-octies(4) 'il professionista fornisce o si obbliga a fornire un contenuto digitale o un servizio digitale al consumatore e il consumatore fornisce o si obbliga a fornire dati personali al professionista'.

⁴³ C Angiolini, *Lo statuto*, 98.

⁴⁴ A Busacca, *I beni digitali*, 136.

⁴⁵ Decision of 13 April 2023, Italian Data Protection Authority 184, [2023] 9893718.

⁴⁶ G Malgieri, 'Property and (Intellectual) Ownership of Consumers' Information: A New Taxonomy for Personal Data' (2016) 4 PinG, 133 e ss.

As mentioned above, however, these solutions neglect the debate on personality rights. Therefore, this taxonomy, although it may help to better address the case of datasets of a mixed nature, composed in other words of personal data and non-personal data, is not admissible insofar as it qualifies data rights as quasi-property.

Indeed, the rationale of personal data protection is related to the broader protection of fundamental rights and freedoms of individuals and not to the stimulation of innovation and cultural production through a temporary monopoly (as in the case of IP rights) or the reduction of transactional costs.⁴⁷

We have seen how a series of rights can be configured on information (access, use and destruction). With regard to personal data, these are: the right to copy and portability (*usus*), the right to rectification, opposition and restriction of processing (*ususfructus*) and the right to erasure (*abusus*).

The right of personality over one's personal data cannot be transferred, but according to GDPR art 6(1)(a), the unlawful processing of personal data becomes lawful with the consent of the data subject, therefore the consent can be used as an instrument to give rise to a contractual relationship of use and economic exploitation of personal data, which may have – in the event that the sole object is the processing of personal data – the form of those used for the exploitation of the patrimonial aspect of personality rights on the basis of the well-known model of the atypical user license developed, in the 1980s, with particular reference to the use of software.⁴⁸

However, a limitation to the negotiation certainty remains the free withdrawal of consent (GDPR art 7(3)).

The issue is debated even though careful doctrine has questioned the admissibility of a generalized withdrawal, believing, in fact, that this instability is limited to indefinite-term treatments without specific contractual coverage, theorizing a rational non-application in the case of a contract concerning the processing of those personal data for a specific period of time.⁴⁹

Part of the doctrine also takes the view that the withdrawal of consent must be understood in the strict sense where the processing has already been carried out, is still being carried out or has not yet been carried out, but is nevertheless supported by a legal basis (legitimate interest of the data controller or use of the data as consideration for services rendered by the data controller).⁵⁰

In conclusion, personal data may be considered goods in the legal sense, but the right over them, although absolute in nature - as with personality rights - is

⁴⁷ G Resta, 'Towards a unified regime of data-rights?', in G Resta, V Zeno-Zencovich (ed.), *Governance of/through Big Data* (Roma Tre-Press 2023) vol 2, 651.

⁴⁸ H Zech, 'Data as a Tradeable Commodity', 68.

⁴⁹ TM Ubertazzi, 'Ripensando alla revoca del consenso nella prospettiva funzionale della privacy' (2022) 38(1) *Contratto e impresa*, 27-51; TM Ubertazzi, 'Modelli di circolazione delle informazioni, funzione della privacy e revoca del consenso' (2022) 31 *AIDA*, 658.

⁵⁰ Ibid 670; C Mignone, *Identità della persona e potere di disposizione* (ESI 2014); S Orlando, 'Il coordinamento tra la direttiva 2019/770 e il GDPR. L'interessato-consumatore', in G Cerrina Feroni (ed.), *Commerciabilità dei dati personali. Profili economici, giuridici, etici della monetizzazione* (il Mulino 2024), 157; E Tosi, 'Consenso autorizzatorio e consenso contrattuale quali autonome basi giuridiche per la patrimonializzazione dei dati personali nei mercati digitali alla luce del GDPR', in G Cerrina Feroni (ed.), *Commerciabilità dei dati personali. Profili economici, giuridici, etici della monetizzazione* (il Mulino 2024), 203.

not proprietary in the strict sense and, consequently, personal data are not transferable to third parties, since, if anything, only the mere right of use - certainly not the personality right - can be transferred, never definitively but always for a fixed term.⁵¹

In relation to personal data, the dominical logic must therefore be overcome in favour of the dynamics of circulation.⁵²

5. Taxonomy of new digital goods in the light of European private law.

At this point, it may be useful to summarize the types of entities that may be the subject of rights.

Entities can be classified according to the layer (or space) of reference: the semantic information plane or semantic layer (the meaning), the syntactic information plane or syntactic layer (the signs and the relationship between them) and the structural information plane or physical layer (the communication channel).

This division leads to a distinction between the information content layer, the code layer and the physical layer.⁵³

In the category of semantic information, pure ideas, which enjoy protection and can therefore be qualified as goods in the legal sense, are inventions, information protected by secrecy and personal data.

Structural information, on the other hand, - since there is an inseparable connection between thing and structure, - corresponds to material things (corporeal things in the strict sense and energies) and, therefore, is the subject of the regulation of rights *in rem*.

Syntactic information represents a *tertium genus* between material things and immaterial entities. Syntactic information ultimately includes those dematerialized entities that have an electronic or scriptural consistency: entities that materialize in an expressive form⁵⁴, cryptocurrencies, digital contents and purely normative things.

As things stand, there is, in the digital markets, the emersion of an articulated taxonomy of new intangible goods deserving legal protection beyond the narrow logic typical of dominical ownership:

- (a) intangible goods of scriptural nature (syntactic layer): (i) things that are purely regulatory (legal layer), such as airport slots, emission allowances and radio frequency rights, (ii) digital goods and services (code layer), such as software, apps and cloud computing (SaaS), and (iii) other

⁵¹ E Tosi, *Circolazione dei dati personali tra contratto e responsabilità. Riflessioni sulla fragilità del consenso e sulla patrimonializzazione dei dati personali nella società della sorveglianza digitale* (Giuffrè 2023), 73 ff.

⁵² E Tosi, 'Circolazione contrattuale dei dati personali tra GDPR e nuovo codice del consumo' (2023) 39(2) *Dir. inf. e informatica*, 189 ff.; E Tosi, 'Dati personali e contratto: un ossimoro apparente' (2023) 2 *EJPLT*, 79 ff.; E Tosi (ed.), *Privacy digitale* (Giuffrè 2019), 16 ff.

⁵³ H Zech, 'Data as a Tradeable Commodity', 53; A De Franceschi, *La vendita di beni con elementi digitali*, 25 'Siffatta distinzione può fungere da base per l'inquadramento dei contenuti digitali nella teoria dei diritti reali'.

⁵⁴ H Zech, 'Information as property', 196 'The best example for syntactic information as an object of property rights are copyrighted works. According to the definition given in art. 9 (2) TRIPS, only expressions are protected, not ideas. These expressions are syntactic information as opposed to the free content (ideas) which qualifies as semantic information'.

intangible goods of syntactic nature, such as digital content that is usually, but not necessarily, protected by copyright in relation to the expressive form of the intellectual work;

- (b) intangible goods of semantic nature (semantic layer): think of personal data and information protected by industrial secrecy, but not only, i.e. pure information.⁵⁵

In this perspective, the logic of ownership is only apparent, since a model of enjoyment of the new digital intangible goods by contract based on the circulation of relative and not absolute rights is indeed preferable since these intangible goods are inexhaustible by default and sharable because they are non-rivalrous and non-excludable.

One thinks, in particular, of the case of personal data, which also – in the light of what has been observed above – seem to qualify as fully-fledged goods in the legal sense since their protection extends beyond the constitutional dimension of personality rights.

The qualification in terms of a fundamental right of the person does not preclude but includes, as the GDPR also admits, without prejudice to the protection of the inviolable dignity of the person, also the economic enjoyment of the intangible attribute of the right of personality by means of a contract, thus overcoming the logic of dominical belonging inapplicable to the present case for the reasons highlighted in this study.

6. Conclusion.

This study has revealed that the emergence of digital intangible goods has forced European private law to face a fundamental choice: whether to extend traditional property concepts to encompass new forms of digital wealth or to develop a new paradigm based on contractual circulation of use rights. The EU decided not to decide.

This indecision reflects a deeper institutional reluctance to commit to a coherent framework that would determine the very architecture of rights in the digital economy. Rather than providing clear guidance, European legislation has adopted a fragmented approach that leaves fundamental doctrinal questions unresolved.

The regulatory landscape reveals this strategic ambiguity across multiple domains. While Directive 2019/770 acknowledges the exchange of services against personal data, it stops short of defining personal data as commodities. The GDPR simultaneously protects personal data as fundamental rights while enabling their economic exploitation through consent mechanisms. VAT directives assimilate intangible rights to tangible goods without addressing the

⁵⁵ A De Franceschi, *La vendita di beni con elementi digitali*; H Zech, 'Information as Property'; H Zech, 'Data as a Tradeable Commodity'; G Pugliese, 'Dalle «res incorporales» del diritto romano ai beni immateriali di alcuni sistemi giuridici odierni' (1982) 36(4) Riv. trim. dir. e proc. civ., 1183 'Almeno in sede di elaborazione scientifica direi che al momento attuale (con riserva quindi di ulteriori o diversi sviluppi) la classificazione debba essere impostata su tre categorie: a) cose (nel senso del c.c. tedesco di «oggetti corporali»); b) entità incorporeali o immateriali (corrispondenti agli «*Immaterialgüter*» della dottrina tedesca, ma comprendenti anche i complessi di cose o di altre entità, se e in quanto siano trattati dal diritto in modo unitario); c) diritti patrimoniali e complessi di diritti o di rapporti giuridici patrimoniali, parimenti se e in quanto siano trattati dal diritto in modo unitario'.

broader implications for property theory. This patchwork of legal provisions, not always expressing a coherent legal design process, creates a legal frame characterized by uncertainty rather than clarity.

The EU's ambiguity reflects competing pressures and incompatible policy objectives. On one side, the imperative to develop the Digital Single Market demands legal frameworks that facilitate the circulation and monetization of digital assets. On the other side, fundamental rights protection requires safeguarding individual autonomy and preventing the commodification of personal attributes. Rather than resolving this tension, European lawmakers have chosen to postpone the fundamental choice, creating hybrid regimes that satisfy neither property nor personality rights logic completely.

This regulatory strategy of deferral has practical consequences. Courts, legal scholars, and market participants are left to navigate a conceptual void where traditional categories prove inadequate and new paradigms remain underdeveloped. The taxonomy proposed in this study—distinguishing between semantic, syntactic, and structural layers of information—offers analytical clarity, but cannot substitute for the policy choices that remain unmade at the legislative level and require prompt definition⁵⁶.

The property-contract tension in digital intangible goods thus remains unresolved by EU legislator.

In the absence of clear legal guidance, the evolution of rights in digital intangible goods will likely proceed through incremental judicial decisions and market practices rather than comprehensive reform. This path-dependent development risks creating suboptimal outcomes that neither fully protect individual rights nor efficiently organize digital markets.

In this complex digital context, adopting the license to use - as contract model for exploitation of intangible goods, like personal data, mandatorily conformed to GDPR and Consumer Code - represents an effective attempt to offer a doctrinal solution, enlightened by constitutional Italian and EU values, that enables both personal protection of a fundamental right on one side and economic - temporary and non-exclusive - exploitation on the other side.

⁵⁶ Legal scholars should keep separated the «typological reconstruction of reality» with the *regula juris* «which simply summarises a set of law provisions», see T. Ascarelli, 'Antigone and Portia' (2015) 1(2) The Italian Law Journal, p. 176; .