**Silvia Corradi**
Institut für Theorie und Zukunft des Rechts, University of Innsbruck
silvia.corradi@uibk.ac.at

# DIGITAL OBJECTS IN THE RHETORICAL SITUATION: A PECULIAR KIND OF CONSTRAINT

https://doi.org/10.17234/978953379337.17

## Abstract

*The paper attempts to achieve a twofold goal. On the one hand, it claims digital objects' aptness to be a peculiar kind of constraint in the rhetorical situation; on the other hand, it shows peculiarities of digital objects compared to "natural objects". In fact, due to the binary nature of the former and their specific materiality, it is suggested that there are different epistemological consequences compared to the latter. In light of these purposes, the inquiry is structured as follows. In section 2, differences between digital objects and natural objects are recalled, focusing on peculiarities of digital technologies or "third-order technologies". In section 3, the debate between Bitzer and Vatz is recalled, in order to clarify constraints' presence in the rhetorical situation and, thus, to the purpose of reinforcing digital objects' candidacy as constraints. Section 4 will show how the usage of digital objects is able to influence the legal practice: the example of recidivism risk assessment algorithm will be recalled, underlying the need for caution in such practice.*

**Keywords:** *digital technologies, rhetorical situation, law, rhetoric, recidivism risk assessment algorithm, epistemology*

## 1. Introduction

The paper focuses on the introduction of digital objects into the rhetorical situation, exploring their peculiarities and claiming for their aptness to constrain the rhetor. For the sake of clarity, it is worth mentioning that, on the one hand, the purpose of this paper does not consist of claiming for the promotion of natural objects instead of digital ones or vice versa: rather, the general scope consists of underlying the different modality of making sense of phenomena and situations between the two. On the other hand, the inquiry cannot be placed under the label of "digital rhetoric" studies, focused on "help[ing] to explain how traditional rhetorical strategies of persuasion function and how they are being reconfigured in digital spaces" (Zappen 2005, 319). In fact, the focus will not regard "traditional rhetorical strategies of persuasion", but rather one specific (epistemological) aspect of the more limited topic of the rhetorical situation. Furthermore, the reconfiguration of rhetoric in digital space is not exactly the topic addressed here, because, as the example of recidivism risk assessment algorithms aims to show, digital objects are analyzed in an "onlife" environment, as Luciano Floridi would call it, because digital and analogue dimension are intertwined.

In light of this purpose, the second section will clarify what is meant by digital objects, comparing them to natural objects; secondly, the third section will briefly focus on the digital objects construction process, investigating why digital objects become constraints in the rhetorical situation. Finally, I will make an example of risk assessment algorithms in the legal context in order to explain how using machine learning tools can influence the rhetorical situation and, more precisely, the judicial one.

## 2. Peculiarities of digital technologies

In order to explain the peculiarity of digital objects, it is worth noting the difference compared to "natural objects" (Hui 2012, 380–395; Capone and Bertolaso 2020, 49–67). Natural objects do not refer to objects given "by nature" like plants or animals, but rather natural objects refer to the way human beings approach phenomena. This peculiar human way of approaching phenomena includes the use of "representative schemes", such as space and time, but also quantity, quality, relation and modality (originally formulated by Kant). Therefore, our capacity to know has always been characterized by the possibility of collocating a certain phenomenon in a given place, at a certain time, possibly also understanding what other phenomena were somehow linked to the one under analysis.

> Let's make an example: flexibility and length of a branch are salient traits of this object; [...] The ability of the branch itself to flex, loading itself without breaking, is an overriding trait, which an individual [...] can take up to make a bow. This simple example offers a glimpse into the way *human beings contextualise objects around them, giving them meaning in a holistic manner, in relation to the world they inhabit and the form of life they constitute*. Intellect, therefore, is not only assisted by its schematic framework that orders a world of objects endowed with superficial qualities and relations, but also by a historically connoted sensibility, we would say by a culture. The subject in experiencing the world around her takes on this culture in the process of knowing her objects (Capone and Bertolaso 2020, 56, my italics)[1].

[1] Original version: "Vediamo un esempio: la flessibilità e la lunghezza di un ramo sono tratti salienti di questo oggetto [...]. La possibilità dello stesso ramo di flettersi, caricandosi senza rompersi, è un tratto sopravveniente, che un individuo (in questo caso anche primitivo) può cogliere per fabbricare un arco. Questo semplice esempio offre uno sguardo sul modo in cui gli esseri umani contestualizzano gli oggetti che li circondano, conferendo loro significato in maniera olistica, in relazione al mondo che abitano e alla forma di vita che costituiscono. L'intelletto dunque non è

Thus, for natural objects, "the given is closely related to sense data" (Hui 2012, 388). Considering the example just mentioned, natural objects can therefore be experienced considering a broad spectrum of representative schemes that allow human beings to orient themselves in the world, grasping not only a single property of the object under analysis, but also the context where that certain property (like the length or flexibility of the branch) can be found.

It seems not to be the case with digital objects. From a general point of view, the term "digital" is used in opposition to the term "analog" (Eyman 2015, 18), which seems to pertain to natural objects. More precisely, the term "digital" can refer to at least two nouns:

1) Digital "dimension". This suggestion is provided by the Independent High-Level Expert Group on Artificial Intelligence, nominated by the European Commission in June 2018, in the Artificial Intelligence system definition[2]; from this point of view, a digital dimension has been defined, with a metaphor, the "water we find ourselves in" regardless of our willingness to it (Andronico 2021, 11). A digital dimension, from this perspective, is a different type of interaction environment: "[E]merging technologies is that they are not only making new discoveries, but are altogether creating new environments" (Russo 2012, 67). In these environments, also legally relevant actions can be conducted, such as signing a contract or establishing a company.
2) Digital "technology". It is possible to point out three different kinds of technology (for these distinctions, Russo 2022, 204; Floridi 2013, 111–16):
    a. First-order technology (what Hui calls "technical objects", see Hui 2012, 384): in this case, the technology is between the human being (the user) and "nature", meant as the environment. An example of first-order technology is a pair of sunglasses, interposed between sun rays and the user. The scheme provided by Floridi (2013) in this case is the following: "[humans – technology – nature]".
    b. Second-order technology: it regards a technology between a user and another technology. Thus, in this case, the technology involved is more sophisticated: an example in this regard is the remote control to start television or scissors to cut paper. The scheme is "[humans – technology – technology]".
    c. Third-order technology: this is the case of digital technology; in this case the role of humans is less evident compared to the others, and there is more interaction within different technologies. Examples in this regard are the Internet or deep learning algorithms, and the scheme is the following one: "[technology – technology – technology]".

According to these distinctions, only third-order technology is digital technology. Of course, this is not the only possible way of understanding "digital": in fact, following an etymological perspective,

---

assistito solo dalla sua intelaiatura schematica che ordina un mondo di oggetti dotati di qualità e relazioni superficiali, ma anche da una sensibilità storicamente connotata, noi diremmo da una cultura. Il soggetto nell'esperire il mondo che lo circonda assume questa cultura nel processo di conoscenza dei suoi oggetti".

2 "Artificial intelligence (AI) systems are software (and possibly also hardware) systems designed by humans that, given a complex goal, act in the *physical* or *digital dimension* by perceiving their environment through data acquisition, interpreting the collected structured or unstructured data, reasoning on the knowledge, or processing the information, derived from this data and deciding the best action(s) to take to achieve the given goal. AI systems can either use symbolic rules or learn a numeric model, and they can also adapt their behaviour by analyzing how the environment is affected by their previous actions" Independent High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI*, 08.04.2019. My italics.

it has been pointed out that in Latin, "digitalis" means "fingers", and it has been argued that digital technologies have "a connection to the material production of texts" (Eyman 2015, 19). From this perspective, they have always been (at least since the earliest forms of writing in human history) the *medium* through which "literacy" has spread (Eyman 2015, 19). Following this reading, due to this continuity, there seems to be nothing exceptional regarding even the most advanced forms of digital technologies, which might be understood as the later stage of this "material production".

A similar reading can be found in Garapon and Lassègue (2021, 35–42). Nevertheless, they underline that informatics and more precisely "computer literacy" or "computer processing of writing" inaugurated a different form of word registration compared to handwriting, because the former implies "rewriting rules", which are absent in the case of the latter (Garapon and Lassègue 2021, 40–41). "Rewriting rules" imply, according to the authors, a transformation process, provoked by informatics, able to change the traditional modality of literacy transmission.

The schemes proposed by Floridi (2013) seem to account for the feature underlined by Garapon and Lassègue and ultimately to emphasize the crucial role played by informatics. Therefore, these distinctions might help to understand the, so to speak, 'epistemological shift' from natural objects, which seems to be proper of only third-order technology according to Floridi's classification (and not to first and second-order technologies)[3]. Think, for instance, of "Mesopotamian clay tokens (dating from the ninth millennium BCE)" (Eyman 2015, 19; Garapon and Lassègue 2021, 36), which, interposing between humans and a paper, enabled the first printing processes. In this case, there seems to be no difference between knowledge of Mesopotamian clay tokens and that of a branch in the wood; on the contrary, both of them are natural objects, and precisely due to this reason, the tokens can be used as writing instruments whereas the branch can serve for making a bow. This is not the case for third-order technology, where the materiality and the degree of autonomy seem different compared to first-order and second-order technologies. For example, "some algorithms in finance buy and sell stocks autonomously and human agents often do not know or understand anymore how these algorithms make decisions" (Russo 2022, 205). The degree of "autonomy" in such cases is higher compared to tools in the previous examples: machine learning (henceforth "ML") algorithms can gain the so called "knowledge base" for its functioning without human intervention (Sartor 2022, 45) – although human agent is still indispensable, basically for providing to algorithms the possibility to do that (see also Russo 2022, 205–206).

For our purpose, it is worth noting that in third-order technologies no natural objects are involved, because every possibly relevant phenomenon for algorithm functioning is already digitalized (I will talk about digitalization shortly): therefore, also thanks to informatics, the third-order technology operates within a digital dimension, not an analogue one. Furthermore, the entire amount of information feeding the ML algorithm cannot be grasped in the same way as natural objects. In this regard, Russo points out the example of calculation: "[E]ven if us human epistemic agents are able to make calculations, we are not able to make calculations on *significantly large* data set: much of statistics nowadays cannot be done without computers, and all the more so in the era of Big Data" (Russo 2022, 205). From this latter perspective, digital technologies operate as epistemic access to information that would not be in any other way reachable by human minds.

3 Technologies seem to be apt to be the medium through which a certain outcome can be realized (Mesopotamian clay tokens used for printing purposes). However, technologies can also be a purpose in themselves. In this latter sense, the term "data" (datum, in Latin) seems to be used, referring to "[a thing] given" (Hui 2012, 388). Thus, from this perspective, technologies can be referred to both the construction process and the outcomes of this process.

This point can perhaps be clarified by recalling the two phases needed for digital objects construction:

1) The first phase is called "datification of objects" (Hui 2012, 389) (or "digitalization" for Garapon and Lassègue 2021, 43), implying a passage from physical dimension to semiotic dimension. To digitalize means "converting the phenomenon into a signal that can be transcribed in the form of a sequence of numbers" (Garapon and Lassègue 2021, 43).
2) The second phase is called "objectification of data", for which "data must be conceptualized as graspable entities by both the human mind and the computational mind" (Hui 2012, 389). Data should thus be able to be transferred from one device to another, but also to be understood by users.

In the phase of digitalization, the physical dimension needs to be translated into a lexicon able to be processed in a digital dimension: in this way, some features of natural objects are, so to speak, "lost in translation". More precisely, digital objects are translated into the so-called "bit-strings", namely objects "made up of bits, the 0s and 1s employed in a binary numbering system, where these bits are structured according to an appropriate file format so as to be readable by the kind of computer hardware for which they are intended" (Faulkner and Runde 2019, 1285). As a consequence, in the example of the branch mentioned at the beginning of the paper, it means that only some information will be reproduced in the digital environment: thus, for instance, in a digital image, length and colour might be reproduced, but not flexibility or smell. Of course, as the previous example of calculation shows, thanks to peculiarities of third-order technologies, other possibilities are available: huge amounts of data, in fact, can be processed and new epistemic accesses are allowed. In this latter case, an emblematic example is that of scientific knowledge: techno-scientific tools usage provides epistemic access to features that would be otherwise precluded. For this reason, it is argued that it is more appropriate, when it comes to scientific knowledge, to always emphasize the "co-production" of scientific knowledge between techno-scientific tools (as epistemic *medium*) and human beings, as for instance, the case of omics technologies for biomarker identification shows (Russo 2022, 51–52).

## 3. The constraints of the rhetorical situation

The rhetorical situation, originally formulated by Lloyd F. Bitzer in 1968, includes three main constituents: exigence, audience and constraints. Among various discussions this paper has sparked, this section will depart from the debate between Bitzer and Richard E. Vatz, following the reading of Scott Consigny, in order to clarify the role of constraints: subsequently, the introduction of digital objects will be suggested. The definition of constraints provided by Bitzer is the following:

> [C]onstraints are made up of persons, events, objects, and relations which are parts of the situation because they have the power to constrain decision and action needed to modify the exigence. Standard sources of constraint include beliefs, attitudes, documents, facts, traditions, images, interests, motives and the like (Bitzer 1968, 8).

Although tautological, the definition suggests a strong influence of a variety of factors in rhetorical decision-making. Therefore, these factors are part of a situation that, for Bitzer, is somehow already given and waits to be discovered by the rhetor: from this perspective, the rhetorical situation is independent from the rhetor, it exists on its own. On the contrary, Vatz affirms that there is nothing already predetermined in the rhetorical situation: every constituent is "created" by the

rhetor (Consigny 1974, 176; Vatz 1973, 158; for a debate reconstruction, see also Biesecker 1989, 112–14). Following Vatz, then, we should conclude that constraints are also created *ex nihilo* by the rhetor: thus, digital objects would not be of interest for the rhetorical situation, because the choice of considering them as constraints is entirely up to the rhetor. However, as Consigny notes, this is not the case. In fact, "Vatz correctly treats the rhetor as creative, but he fails to account for the real constraints on the rhetor's activity" (Consigny 1974, 176). Thus, Consigny advocates a third way between Bitzer and Vatz.

For the sake of clarity, the most salient aspects of Consigny's proposal for our purposes are summarized. He suggests treating rhetoric as an art, characterized by two features: "integrity" and "receptivity". The first feature consists of an "universal" capacity that allows the rhetor "to disclose and manage indeterminate factors in novel situations without his action being predetermined" (Consigny 1974, 179): this capacity is needed for Consigny because the rhetor will always face new problems to deal with, and thus she is required to have the ability to "manage" them (in fact, rhetoric is considered by Consigny a "managerial art": Consigny 1974, 184). The second feature of rhetoric as art is receptivity, meant as that capacity to "become engaged in individual situations without simply inventing and thereby predetermining which problems he is going to find in them" (Consigny 1974, 181). This second condition, which emphasizes the heuristic value of rhetoric ("The art of rhetoric is thus a 'heuristic' art, allowing the rhetor to discover real issues in indeterminate situations" (Consigny 1974, 180)), focuses on specific features of a novel situation. It seems to imply rejection of Vatz's idea, according to which the entire rhetorical situation is "created" by the rhetor: if the rhetor must be able to catch particularities of a situation, it means that those particularities are already present without her "creation". In similar terms, Garrett and Xiao 1993, 38, commenting on the debate between Vatz and Bitzer, underline that "this freedom [of the rhetor] is inherently limited, that no rhetor can completely break free of the fundamental values and presuppositions of his or her discourse community and tradition".

In order to satisfy these two conditions, Consigny proposes to consider rhetoric as "an art of topics or commonplaces" (Consigny 1974, 181). Within his proposal, topics are considered in a twofold way: as "instrument" and as "situation". On the one hand, concerning the first concept, "the topic or commonplace is an instrument or device for the invention of arguments and the disclosure of phenomena". Thus, "the topic is a device which allows the rhetor to discover, through selection and arrangement, that which is relevant and persuasive in a particular situation" (Consigny 1974, 181). This is also called the formal instrument at the disposal of the rhetor: it emphasizes the creative role, due to certain selections in preparing the speech and not others.

On the other hand, topics are meant as "realms". "In this second sense, 'place' of the rhetor is that region or field marked by the particularities of persons, acts, and agencies in which the rhetor closes and establishes meaningful relationships. The topic location or site, the Latin *situs*, from which we derive our 'situation'." (Consigny 1974, 182). This component represents the concrete situation in which the rhetor operates, and from which the deliberation begins; it is also called the context or material situation (Consigny 1974, 183).

For the purpose of resolving the tension between Bitzer and Vatz, Consigny suggests considering these two meanings of "topics" intertwined, which means that there is always an "interplay" between the two. If this is not the case, both alternatives are contestable positions: thus, on one hand, meaning rhetoric only as formal topic, emphasizing its creative role, would lead to Vatz's conclusion, according to which the entire rhetorical situation is "created"; on the other hand, preferring the material situation at the expense of the formal instrument would confirm Bitzer's

position, for whom the situation is already determinate, therefore the creative role of the rhetor is neglected. Rather, Consigny claims that

> the topic is thus both instrument and situation in that as merely formal device the topic has no significance: it must be concretely engaged in a particular experiential context. But the context or material situation independent of the formal topic is indeterminate and without meaning. The formal and the material factors must exist in a dynamic interrelation if the rhetor is to be able to discover and manage the particular exigence of the situation (Consigny 1974, 183).

In this way, Consigny refuses the idea of Bitzer, according to whom "rhetorical situation is empirically *determinate*, consisting of an objectively recognizable 'exigence' or urgent problem potentially modifiable through persuasive discourse" (Consigny 1974, 175). However, at the same time, Consigny criticizes the stance of Vatz, underlining that he "provides no means to distinguish relevant problems from those imaginary or hypothetical ones the rhetor merely "invents"" (Consigny 1974, 180). Instead, for Consigny, the distinction exists, and thus some components of the rhetorical situation are not available for the rhetor, so they cannot be "created" by her. Therefore, it is plausible to conclude that at least some constraints, because constitutive of the rhetorical situation, are not manageable by the rhetor and, therefore, are given in a certain (rhetorical) situation.

In light of these considerations, how can digital objects influence the rhetorical discourse at the level of constraints? As pointed out in the previous section, digital objects, due to their binary nature, possess different features compared to natural objects, because the latter ones need to be translated into the digital dimension. In fact, as already mentioned, the context where specific information is grasped cannot be taken into consideration: thus, the precise space and time where information originally derives cannot be experienced. It is therefore suggested that digital objects will be apt for constraining the rhetor in a peculiar way (different compared to the one possibly happening with natural objects), which is given by the intrinsic structure of digital objects.

In order to stress this aspect, Hildebrandt (2008) suggests referring to this aspect as "technological normativity", i.e. "the way a particular technological device or infrastructure actually constrains human actions, inviting or enforcing, inhibiting or prohibiting types of behaviour" (Hildebrandt 2008, 173; for an analysis on the relationship between technology and normativity see Radder 2009, 896 who, similarly to Hildebrandt, affirms that "technology is inherently normative if its realization implies one or more norms or normative claims about what to say or do"). In order to explain how technological normativity works, she recalls the Berlin key example developed by Bruno Latour (2000, 12–14). As long as this explanation is concerned, it is worth recalling that the Berlin key was used in apartment buildings in Germany, in which there was a need to lock the door of the main entrance during the night and leave the door open during the day. Due to the risk that people would forget to do so, the Berlin key was invented. Its peculiar shape allowed people from outside the building to insert the key and to open the door, but the key could be pulled out only from inside the building, and thus on the other side of the door. A person using the Berlin key "cannot withdraw her key after having bolted the door by a 270° rotation as is her habit with every key in the world, [but] she must be able to make the key, now horizontal, slip from the other side through the lock" (Latour 2000, 14). Only by going through the keyhole, could the Berlin key be removed, provoking the door closure. As Hildebrandt explains,

> [t]his key forces the user to open the door by pushing the key through the keyhole to the other side of the door, and after entering the house, the door can only be closed by turning the key and thus locking the door. This key demonstrates how a technological device actually regulates and constitutes the interactions of a resident, the key, her door and others who wish to enter the house (Hildebrandt 2008, 173).

Although the Berlin key does not regard a third-order technology but a second-order technology, it seems to be an example suitable for providing an idea of how tools can be constraints to human behaviour. In the next section, the example of recidivism risk assessment algorithms as third-order technology aims to clarify the constraints for judicial decision-making.

## 4. The constraints of recidivism risk assessment algorithms

In a recent paper Ratti and Russo (2024) point out that the relation between science and values can have two "directions": the first one is "*from values to science*, in the sense that values shape the concepts, the methodologies, and the choices made by scientists throughout the entire scientific process"); the second direction is "*from science to values*, in the sense that methodologies or scientific concepts create the conditions for some values, rather than others, to be promoted" (Ratti and Russo 2024, 3, their italics). As example of the second direction, which is the one this inquiry is interested in, they explain how ML tools promote certain values and not others: departing from the (nowadays well established) assumption that "any piece of technology is not morally neutral" (Ratti and Russo 2024, 6; among many, Miller 2024, 6–10), their example focuses on recidivism risk assessment algorithms, used to estimate risks for an individual to be rearrested for a future crime (involved, for instance, in the legal case State vs. Loomis, also known as "COMPAS" case).

For our purposes, the example seems able to clarify how digital objects enter the rhetorical situation and provide peculiar kinds of constraints. Departing from the research conducted by Ratti and Russo, two different constraints can be underlined. While the first one regards the promotion of recidivism risk assessment algorithms of "a formalist interpretation of legal principles – namely, that laws have one correct, mechanically discoverable meaning" (Pruss 2021, 1103), the second constraint concerns punishment purpose. In fact, the risk assessment algorithm "presupposes that the purpose of punishment is consequentialist (crime control) rather than deontological (retributive)" (Pruss 2021, 15; Ratti and Russo 2024, 16). These two approaches are summarized as follows: "Deontological views of punishment see offenders' blameworthiness and culpability (such as seriousness of harm and intent) as central to determine punishment, while consequentialist views emphasize the importance of consequences (good or bad) of punishment" (Ratti and Russo 2024, 16). Thus, while deontological/retributive views would emphasize illegal behaviour and guilt of the accused, the consequentialist views would focus on the consequences that a certain punishment would provoke. The point made by the authors in this regard consists in claiming that risk assessment algorithm usage in courts would promote consequentialist views of punishment, because ML tool scope, by its nature, will provide "predictions" precisely contributing to predict how likely it is that the offence will be committed again (Ratti and Russo 2024, 18). "To put it more precisely: *given* the specific characteristics of ML tools, *if* such tools are used in the justice system, *then* the notion of punishment and justice that will be promoted is CVP" (Ratti and Russo 2024, 18, where "CVP" stands for "consequentialist views of punishment").

At first glance, it might seem that ML tools constraints can be understood as many others in the rhetorical situation: Bitzer, in fact, mentions a wide range of factors and perhaps values promotion connected to risk assessment algorithms might be placed under the label of "beliefs". From this perspective, as Hildebrandt points out, constraints "should not be understood as a negative term: constraints are the condition of possibility of (inter)action, they do not only inhibit or rule out certain behaviour, they also create or induce certain types of behaviour" (Hildebrandt 2008, 174).

However, when ML tools operate in specific contexts, the risk underlined is the one of "domain distortion" as Pruss calls it (Pruss 2021, 3), which seems to suggest that these technologies have

an impact on the way in which one operates, that may not be adequate within a specific context. More precisely, it seems that there is the risk that using ML tools, due to their implicit values promotion, would lead to neglecting some specific features linked to the purpose (which, in the case of recidivism risk assessment algorithms, consists in a public function) of a certain activity. For example, regarding the first constraint mentioned above, the value promotion that "laws have one correct, mechanically discoverable meaning" is not respectful of legal interpretation theories supporting skeptical positions, which generally affirm that "more than one meaning can be determined for each normative utterance"[4] (Velluzzi 2008, 494; see also Poggi 2018, 294–95). This aspect is relevant if connected to judicial decision-making, because it has been argued that the intrinsically vagueness and indeterminacy of legal language (on this topic see, by way of example, Trujillo 2019; Puppo 2012) is actually a desirable condition:

> [A]djudicators have good reason to conceal their extant uncertainty on a particular issue or to maintain a degree of future unpredictability. For example, human judges might obfuscate the grounds and limits of their precedential decisions today in order to preserve room for jurisprudential maneuvering tomorrow" (Re and Solow-Niederman 2019, 265).

These considerations suggest that there are specific features pertaining to a certain practice (in this case, the legal interpretation of judges) that must be safeguarded due to the scope of that practice. Similarly, recalling the example of the branch mentioned at the beginning of the paper, if the purpose is to make a bow, the construction activity would require someone to know how long, flexible, sturdy, etc. that branch is. And any interference with regard to knowledge of these characteristics will hinder the construction process.

## 5. Conclusion

The paper attempted to show that digital objects enter the rhetorical situation, and thus they are apt to influence the rhetor's speech. After a clarification on peculiarities of digital objects and their difference compared to natural objects (section 2), it has been suggested that usage of such technologies provoke epistemological shifts: on one hand, digital objects increase epistemic accesses; on the other, however, for their binary nature made through datification and objectification stages, they cannot provide the same possibilities proper of natural objects (section 3). Finally, the example of recidivism risk assessment algorithm was recalled, in order to explain how digital objects can operate as constraints in the judicial context (section 4).

A clarification is worth emphasizing as a conclusion. The fourth section underlines a risk concerning the use of ML tools in courts: the reason why this risk was pointed out was not the one of arguing that the introduction of digital objects into the rhetorical situation necessarily implies harmful effects, but rather to raise awareness and caution on this epistemological shift, which is not without consequences. And, in the case of the judicial context, caution must be particularly high: considering constitutional guarantees and the complexity of judging, it is not surprising that a variety of concerns have been raised concerning the ML tools usage in courts (by way of example, Re and Solow-Niederman 2019, 262–78; Schwerzmann 2021, 1893–98; Lo Giudice 2021, 193–200). Nevertheless, the point made here was different: namely, the one of underlining digital objects' aptness to be constraints in the rhetorical situation. The example of the risk assessment algorithms attempted to address this claim, suggesting that due to their peculiar features, digital objects may hide risks of which it is necessary to be aware, especially in the legal context.

4 Original version: "[P]er ogni enunciato normativo è determinabile più di un significato".

## References


Andronico, Alberto. 2021. "Giustizia digitale e forme di vita. Alcune riflessioni sul nostro nuovo mondo [Digital justice and forms of life. Some reflections on our new world]." *Teoria e Critica della Regolazione Sociale* 2 (23): 11–28.

Biesecker, Barbara. 1989. "Rethinking the Rhetorical Situation from within the Thematic of Différance." *Philosophy & Rhetoric* 22 (2): 110–30.

Bitzer, Lloyd F. 1968. "The Rhetorical Situation." *Philosophy & Rhetoric*, 1 (1): 1–14.

Capone, Luca, and Marta Bertolaso. 2020. "L'incommensurabilità dell'esperienza umana. Forma e materia nell'era digitale [The incommensurability of human experience. Form and matter in the digital age]." In *Etica digitale. Verità, responsabilità e fiducia nell'era delle macchine intelligenti [Digital ethics. Truth, responsibility and trust in the age of intelligent machines]*, edited by Marta Bertolaso and Giovanni Lo Storto, 49–67. Rome: Luiss University Press.

Consigny, Scott. 1974. "Rhetoric and Its Situations." *Philosophy & Rhetoric* 7 (3): 175–86.

Edbauer, Jenny. 2005. "Unframing Models of Public Distribution: From Rhetorical Situation to Rhetorical Ecologies." *Rhetoric Society Quarterly* 35 (4): 5–24.

Eyman, Douglas. 2015. *Digital rhetoric. Theory, method, practice*. San Francisco: University of Michigan Press.

Faulkner, Philip and Jochen Runde. 2019. "Theorizing the Digital Object." *MIS Quarterly* 43 (4): 1279–1302.

Floridi, Luciano. 2013. "Technology's In-Betweeness." *Philos. Technol*. 26: 111–15.

Garapon, Antoine and Jean Lassègue. 2021. *La giustizia digitale. Determinismo tecnologico e libertà [Digital justice. Technological determinism and freedom]*. Bologna: Il Mulino.

Garret, Mary and Xiaosui Xiao. 1993. "The Rhetorical Situation Revisited." *Rhetoric Society Quarterly* 23 (2): 30–40.

Hildebrant, Mireille. 2008. "Legal and Technological Normativity: more (and less) than twin sisters." *Techné*, 12 (3): 169–81.

Hui, Yuk. 2012. "What is a digital object?." *Metaphilosophy* 43 (4): 380–95.

Latour, Bruno. 2000. "The Berlin key or how to do words with things." In *Matter, Materiality and Modern Culture*, edited by Paul Graves-Brown, 10–21. London: Routledge.

Miller, Boaz. 2024. *The Social Dimensions Of Scientific Knowledge. Consensus, Controversy, and Coproduction*. Cambridge: Cambridge University Press.

Poggi, Francesca. 2018. "L'interpretazione giuridica come ponte tra diritto e morale. A proposito di un recente libro di Vittorio Villa [Legal interpretation as a bridge between law and morality. Regarding a recent book by Vittorio Villa]." *Ragion pratica* 1: 289–301.

Pruss, Dasha. 2021. "Mechanical jurisprudence and domain distortion: How predictive algorithms warp the Law." *Philosophy of Science* 88 (5): 1101–112.

Puppo, Federico. 2012. *Dalla vaghezza del linguaggio alla retorica forense. Saggio di logica giuridica [From the vagueness of language to forensic rhetoric. Essay on legal logic]*. Milan: Cedam.

Radder, Hans. 2009. "Why technologies are inherently normative." In *Handbook of the Philosophy of Science*, edited by Anthonie Meijers, 887–919. Amsterdam: Elsevier.

Ratti, Emanuele and Federica Russo. 2024. "Science and values: a two-way direction." *European Journal for Philosophy of Science* 14 (6): 1–23.

Re, Richard M. and Alicia Solow-Niederman. 2019. "Developing Artificially Intelligent Justice." *Stanford Technology Law Review* 22 (242): 242–89.

Russo, Federica. 2012. "The Homo Poieticus and the Bridge Between Physis and Techne." In *Luciano Floridi's Philosophy of Technology: Critical Reflections*, edited by Hilmi Demir, 65–81. Cham: Springer.

Russo, Federica. 2022. *Techno-Scientific Practices. An Informational Approach*. London: Rowman & Littlefield.

Sartor, Giovanni. 2022. *L'intelligenza artificiale e il diritto [Artificial intelligence and the law]*. Turin: Giappichelli.

Schwerzmann, Katia. 2021. "Abolish! Against the Use of Risk Assessment Algorithms at Sentencing in the US Criminal Justice System." *Philosophy & Technology* 34: 1883–1904.

Trujillo, Isabel. 2019. "Linguaggio. Il discorso giuridico tra linguaggio e azioni [Language. Legal discourse between language and actions]." In *Dimensioni del diritto [Dimensions of law]*, edited by Alberto Andronico, Tommaso Greco and Fabio Macioce, 399–426. Turin: Giappichelli.

Velluzzi, Vito. 2008. "Interpretazione degli enunciati normativi, linguaggio giuridico, certezza del diritto [Interpretation of normative provisions, legal language, legal certainty]." *Criminalia*, 495–507.

Zappen, James P. 2005. "Digital Rhetoric: Toward an Integrated Theory." *Technical communication quarterly* 14 (3): 319–25.