History, documentary sources and future: Use of diplomatics for the analysis of contemporary digital documentation

História, fontes documentais e futuro: utilização da diplomática para a análise da documentação digital contemporânea

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Abstract

This study addresses the theme of the next or imminent use, as sources of the historical research, of digital documents that, over the last few years, have increasingly settled in the archives produced by individuals or organizations. Regarding this use, it is essential to be able to assess the genuineness of the digital documentation used as a historical source, on account of a few relevant differences existing between the traditional analog document and the digital one. This essay explores the primary role diplomatics can play just by identifying solutions for verification of the genuineness in a digital environment, beginning from its most recent currents of thought and research. Within the study of the digital document, the discipline is being moulded as a “boundary discipline” that incorporates contributions by other sciences and, as such, seems to be capable of elaborating an overview of the digital document that is distant from the mainly partial views so far developed by other sciences.

Keywords

Archival science, diplomatics, documentary sources, electronic documents, genuineness.
Resumo
Este estudo aborda o tema da utilização próxima ou iminente, como fontes de investigação histórica, de documentos digitais que, nos últimos anos, se têm instalado cada vez mais nos arquivos produzidos por indivíduos ou organizações. Relativamente a esta utilização, é essencial poder avaliar a autenticidade da documentação digital utilizada como fonte histórica, devido a algumas diferenças relevantes existentes entre o documento analógico tradicional e o digital. Este ensaio explora o papel primordial que a diplomática pode desempenhar apenas na identificação de soluções para a verificação da autenticidade em ambiente digital, partindo das suas mais recentes correntes de pensamento e investigação. No âmbito do estudo do documento digital, a disciplina está a ser moldada como uma “disciplina de fronteira” que incorpora contribuições de outras ciências e, como tal, parece ser capaz de elaborar uma visão geral do documento digital que se distancia das visões principalmente parciais até agora desenvolvidas por outras ciências.

Palavras-chave
Arquivística, Diplomática, fontes documentais, documentos electrónicos, autenticidade.

The digital document genuineness as a future historical source

Time has come: after decades of endless theories on the future development of documentary historical sources, selected by digital archives that were increasingly disseminating the documentary production by individuals and organizations1, today we are faced with the necessity to focus on them more concretely, both in terms of their preservation and use by anyone and, in particular, by historical researchers.

Before getting an insight into what can meet the requirement of a more concrete approach to this theme, it should be clarified what sort of connotation is used in this essay for the expression “digital documentary sources”, considering the multiple information typologies – at times quite different from each other – which, especially in the contemporary age, are made to fall within the digital documentary domain. In the following pages, reference is made to the digital document concept with a specific connotation: a set of information that is no longer recorded on an analog medium,

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1 Within the scope of this essay, digital documentary sources are all those documents that were originally produced on a digital medium and, following the record-keeping practices and regulations in different countries, were selected for a permanent preservation, in view of their possible use by the historical research. As a consequence, the documentary sources that were originally produced on analog media and only later digitalized for reasons of historical or cultural use, and then reproduced on additional digital media, do not fall within the objectives of this discussion.
but on a digital one, and is made or received by an individual or organization in the course of their activities, *i.e.* for performative purposes\(^2\). This connotation is crucial, above all because of the reference to the performative dimension highlighting a typology of information that was originally intended not to deliver knowledge, but to have an impact on the social reality where that individual or organization operates. For this reason, the digital document herein looked upon is not to be intended as a mere description of reality, but as its own representation: the digital document, as a surrogate of a portion of reality, takes part in the interactions animating the social reality, thus making it possible to modify it depending on the intentions of the individual and the organization making use of the documentation. Such a performative capability\(^3\) moves across space and through time, as the document, in particular the digital one, can be propagated along those two dimensions thanks to its high transmissibility, and contextually delivering its representation effects. However, this only concretely happens further to a precise legal recognition, first by the customary law, then also under the positive law, as well as in legal practice and theory. As a matter of fact, the digital document only achieves its own performative objectives if modelled on a character set formalized by law and under which the document itself is recognized as such by the society; it is therefore acknowledged as a valid substitute for the portion of represented reality and capable of generating the expected effects on the social dimension. This close inherency between the digital document performativeness and the law sphere explains the circumstance allowing the law to intervene to a considerable extent – in almost all *civil law* and *common*
law countries – for the normalization of the use and structural characteristics of the digital document⁴, of course with the connotation that is being clarified.

So, beginning from the digital document intended as such and originally produced not for purposes of historical research but for the current performative requirements of individuals and organizations, how does it succeed in being used as a historical source? The archival tradition can assist here: the transition the digital document is undergoing, from the original pragmatic requirements generating it to the cognitive requirements of the historical research it was later subjected to, is guided by the same selection process that has been refined over the last few centuries for the analog documentation. So in the context of the archives in which the documents have settled, we can imagine the following perspective: among the digital documentation that is no more useful for the performative purposes of individuals and organizations originally making use of them, the one deemed to be of any historical interest, according to the country-specific archival practices and regulations, is selected and destined to a permanent preservation, under the accountability of institutions bound to achieve real cultural purposes. Such a transition highlights how the historical source’s use profile that the digital document may acquire – obviously if its life cycle does not end with destruction – does not activate at the time of its original creation, but only later⁵, by replacing and more seldom overlapping the native performative valences⁶.

However, any use of the document as a historical source, no matter if analog or digital, is made concretely possible by a prerequisite: the verification – at least at the level of presumption – of the documentary genuineness. A question is now raised, considering that the digital documentation, rather than the traditional one, is or will be subject to the use of the historical research more and more frequently. If, as observed earlier, there are different timeframes between the historical uses of the document and its original performative purposes, some of the peculiar characteristics in connection to the document creation are only conditioned by those purposes.

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⁴ Within this regulatory effort towards the digital document, the various national contexts have been inspired by an international common principle, referred to as functional equivalent approach (Alfier, 2020, 97-101). This principle aims at establishing the conditions by which the information and communication technologies ensure the baseline documentary characteristics already envisaged for the traditional analog document by the respective laws.

⁵ The theme of the document’s use value, hovering between aims of a pragmatic nature and purposes of historical research, was particularly expanded by a few archivists, e.g. by underlining how such a distinction in purpose only has an operational value. According to them, from a theoretical point of view the historical value arises out of the document production and coexists with its native practical purposes; on the other hand, the passing of time does not cancel the documents’ performative capability completely (Carucci, 2000, 22). This position does not confute any of the statements herein contained. The document’s historical value as its own attribute is one thing, the use that can be made of the same document within the historical research and just on account of the same value is again something else. It can therefore be confirmed that the historical value has been present since the document was first created, but it should not be denied that the use for historical purposes concretely activates long after its genesis.

⁶ Archivists themselves are conscious about of this, as they pay particular attention to the use for historical purposes of documents selected by them for permanent preservation: “according to Jean Favier, the archival document is a source for history, even though the person issuing it did not have such a purpose. This is why, among all the evidence, this is the most reliable” (Lodolini, 2000, 189).
So, we should question whether the pursuance of performative functions in a digital documentary environment indirectly affects the critical method that was traditionally developed, in particular by diplomatics, to come to a documentary genuineness appraisal within the historical research context, given that such a method has been elaborated by taking into account documentary characteristics conditioned by the pursuance of performative purposes in an analog environment.

With reference to the documentary genuineness verification, it is of primary importance to make general considerations that are valid for the whole of the documentary domain, both analog and digital. It has already been observed that any document can have performative functions as originally planned, to the extent that it is composed as the representation of a portion of reality, thus posing itself as a surrogate of that portion in terms of time and space. However, we should not make the mistake of confusing the concept of representation with the concept of similarity. Both certainly make reference to the equivalence notion, but with a substantial difference: the representation, not the similarity, requires that both terms – representative and represented – belong to distinct categories. Effectively, one entity does not represent another, unless it is as well different. In other terms, the similarity within the difference is a characteristic and, at the same time, a challenge for the representation.

So, if the document in its own essence is recognized as a performative instrument, i.e. a representation instrument, as a result it aims at achieving a similarity-based relationship inscribed on a difference-based relationship: the documentation is other than the portion of reality that is required to represent, but, to the extent that it represents it, it is also contextually a similar surrogate of it. So, if any analog or digital document is fuelled by similarity and alterity with regards to the represented reality, the ability to assess the balance that the document each time creates between these two variables becomes a decisive factor: in particular by establishing if the level of alterity has not compromised the minimum level of similarity required for a use of the document as a credible surrogate of what was represented. In this ambivalence of similarity and alterity a question remains rooted, always and forever connected to the documentary phenomenon: while employing the documentation, users cannot avoid reasonably raising a doubt, since the documentation by its own nature always brings a pending judgement of genuineness with itself. Such a judgement becomes even more urgent as more distant in time the document is from its original creation. Effectively the interest in preserving genuineness, on the part of those who initially make use of the documentation for its native performative capability, is progressively decreased with the passing of time. Contextually, then, the same documentation is more likely to be subject to alteration and falsification also by third parties, so as to lose its nature of credible surrogate of the portion of represented reality. The peak of this urgency is reached just when the document is about to be used by the historical research: with the start of this phase, decades after its genesis, the document is, so
to say, subtracted from the original place that saw its creation and its first uses, to be taken into a new scope of custody for cultural purposes, possibly after the documentation is passed from hand to hand, which might have raised doubts about the unbroken control of the documentary genuineness.

After this general consideration about the intrinsically critical relationship between genuineness and documentation, it is now appropriate to get an insight into whether and how the digital document’s peculiar characteristics affect the method developed by the diplomacy tradition, for the science-based verification of the genuineness of the document being used for historical purposes. First of all, it should be noted what such a method is based upon, *inter alia*, beginning from a precise structural characteristic by which the analog document achieves its native performative purposes, *i.e.* stability. In the most classic diplomacy perspective the traditional document is qualifiable as non-false when featuring structural characteristics, *i.e.* documentary forms, which are comparatively consistent with those typical of the documentation produced within the same context of creation and use. Such a requirement, in turn, appeals to the documentary stability, as this acts as a dimension helping the use of the comparative approach:

- the comparison only becomes effective if there is the assumption that the comparable terms are stable;
- the stability serves as the dimension enabling the analog document to perpetuate – in physiological conditions – as identical to itself, beginning from its originating point and despite the time and space it later goes through. So the comparative approach can differentiate, if any documentary issues occur, between forgery when the document is produced and forgery of the document later in its life span.

Such a stability is based on the so-called material incorporation requirement (Figure 1): the analog record is characterized, since its first creation, by the fact that its content cannot be separated from its specific medium. So, the documentary representation only exists if it is incorporated in the specific basic material accommodating it when it was initially produced. This kind of bond cannot be interrupted: from the moment a new non-native medium comes into action, a process is derived whereby the generation of a new second-level document, *i.e.* the copy, is started. This continuity of the medium certainly fuels the documentary stability that, as outlined above, has influenced the elaboration of the critical method by which diplomacy can scientifically assess the genuineness of analog records within the context of their use for historical purposes. The material incorporation requirement is not applied to the digital record domain, where the completely opposite is valid: the medium interchangeability requirement (Figure 1). The digital documentation is characterized,
since its first creation, by different media with a marked capability of continuously moving from one to another across the whole documentary life cycle. This “traveling” mode fuels a high level of reproducibility, transmissibility and reusability of the electronic document, well contributing to the enthusiasm that stimulates the use of digital documentation. There is also clear evidence of how the digital record exists as an ab-solutus, loose from every single medium specification: transferring one medium to another does not actually compromise any of its core characteristics, or deplete its capability of fulfilling the performative functions that are assigned to it.

So, if the analog record seems to be inscribed on a strong stability dimension, in contrast to it the digital record is deep in a marked dynamicity dimension.

Fundamentally, passing from a greater stability dimension to a dominant dynamicity dimension is not so odd, when compared to the history of documentation in its entirety. In fact it can be interpreted as a long and uninterrupted sequence of stages, constantly influenced by the interrelated urges for stability and for dynamicity. The truth is they are conceptually conflicting, but a document is precisely that pragmatic synthesis social product by which they, each time and at different latitudes and ages, set to mutually reach an acceptable balance. This is certainly a compromise that is never final, going through breaking processes and re-composition phases (Alfier, 2018, p. 63), like the ones we are experiencing in this historical transition phase from the analog documentary domain to the digital one.

In the wake of the digital dissemination, the increasing documentary dynamicity lays out critical issues on the traditional method, by which the diplomatics formulates the scientific appraisals of the genuineness of the documentary sources:
• firstly, the contemporary age is experiencing a significant weakening of the documentation structuring based on well-formalised and differentiated documentary typologies, which for instance predominantly characterize the Medieval documentation and represent a precise reference in the traditional application of the comparative method used by the diplomatics itself;

• secondly, that method is assumed to have a documentary object with a strong stability, whereas today’s digital record is fuelled by a greater propensity to dynamicity and leaves us to question about the meaning of genuineness making reference to a documentary entity with no fixity.

Diplomatics as a science dedicated to the digital document study

In order to face the critical issues that have been raised and that the digital is projecting over the traditional method used by diplomatics to assess the genuineness of documentary sources, it seems necessary to take a quite precise road: thoroughly investigate the digital document’s structure and identify similarities and differences through a comparative approach, with the structural aspects already known for the analog documentation. The discipline that, more than any other, can walk down this path is certainly diplomatics. In fact not only is it the science that has elaborated the methodology for the documentary genuineness appraisal, but is also the science investigating the documentary forms, in their synchronic and diachronic variability: from this viewpoint, it also presents itself as a discipline dedicated to the study of the documentary structures and their evolution, right in the contemporary age,

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7 This phenomenon comes from far back in the past and Adolf Brenneke sheds some light upon it, by observing that, in medieval times, above all the documents narrowly defined, the Urkunden, were preserved: they contained the final act of a legal transaction and had a precise legal effectiveness. But the writings that recorded the stages preceding or preparing the conclusion of the legal transaction, by him defined Akten, i.e. acts, were regularly lost, because they did not have any precise legal validity. From the beginning, they had been issued by employing the documentary typology of letter (Brenneke, 1968, p. 28-29), which is one of the least standardized among the historical documentary types. Then, in the course of the following centuries, further to the radical transformation involving in particular the exercise of public authority, this strong unbalance situation in favour of documents narrowly defined versus acts has been progressively corrected: the quantity of produced acts had been unavoidably growing until it became dominant. On a quality level, they began to be the object of deliberate preserving strategies, until in the contemporary age – e.g. in the Italian administrative law – they have also acquired a precise legal value. Therefore, the contemporary documentary domain, in particular the one settled in the public archives, is today like a ‘great sea’ populated by acts, i.e. by documents supplied with a minimum level of standardization, and whose presence ends up with ‘diluting’ the presence of others documentary typologies that are, in contrast, characterized by a strong standardization.

8 Giovanna Nicolaj recognizes that “diplomatics can only turn into a dynamic and variable history of documentation” (Nicolaj, 2007, 92). It is a dynamic and variable history, like the documentary forms: considering the diachronic phenomena, a single documentary structure generally has its own development arc, from the moment it is delineated to when it stabilises, deteriorates or transforms. Synchronously, documentary forms can unfold in a wide range going from the respective structural atypicality and poverty to the extreme opposite, that is an ultimate and composite formal structure. Again, from a synchronous point of view and within the scope of the documentation used by a certain society, there are marginal, alternative or backward areas, marked by divergence, anomalies or delays, that are in contrast to what can instead be considered as the heart of the system or to the direction towards evolution and to the goal of a normalization process (Nicolaj, 1998, p. 963).
too. So the diplomatics we appeal to is not only a science intended to go beyond the traditional scope of studies that are most represented by the documentation dating back to the medieval times, but also a discipline that, in order to get the peculiar structural nature of the digital document, is capable of carrying out a significant mediation with other disciplines that also explore the digital documentation, each of them, though, from a particular point of view (Figure 2).

![Diagram of Diplomatics mediation within the digital document study.](image)

**Figure 2.** Diplomatics mediation within the digital document study.

In the wake of this capability of invoking other disciplinary contributions – in particular by the computer science, the archival science and the law science applied to the digital scenario – the diplomatics we appeal to is capable of making a synthesis on the digital record, beyond the approach to partiality of the single disciplines, that always focus on only one part of the aspects characterizing the digital documentation phenomenology in its entirety: the dynamicity stressed by the computer science; the functional contexts of use of the records management and preservation highlighted by the archival science; the performative nature derived from law and brought to the foreground by the law science dedicated to the digital document. So, this concept of diplomatics, oriented to the full understanding of the digital document’s structural dimension, can not only reinterpret the method of the documentary genuineness critical appraisal, but also add something, that is today still completely missing, to the studies: a more complete and faceted vision of the digital documentation.

To be fair, this diplomatics has been operating and active for some time now. Therefore, it is not about walking down a path that has not been started yet, but continuing with determination and consistency on a road already tracked. In fact between the end of the last century and the beginning of this, a few diplomatics manifestations definitely abandoned the traditional position paradigmatically expressed by Armando Petrucci’s thought. He believed that the Medieval time’s symbolism and
document structuring as a complex mechanism of intrinsic and extrinsic elements were two interconnected dimensions. He came therefore to a precise conclusion: the social symbolism decline, that started towards the end of the Middle Ages and accelerated in modern and contemporary times, implied a parallel documentary formalism degradation, with a further document de-structuring and de-formalization, which in the last instance would have made the contribution by diplomatics as a science of documentary structures useless, outside the established historical and geographical boundaries represented by the Medieval Latin Western world (Petrucci, 1963, p. 795-797). This presumably insurmountable wall is actually being scaled by a few diplomatics currents that, in recent times, recognize how the document – even in today’s contemporary phase with the dissemination of digital technologies – continues regardless to be moulded through forms, structures and elements making reference to the representative and, in the final analysis, symbolic requirements of the new social contexts where the documentation is used. This is all the more so as clear empirical evidence, with permission of Armando Petrucci’s reflections, underlines the complexity of formalisms and conventions the digital document’s structure is today bearing in some of its manifestations (Alfier, 2020, p. 66-72). This process of going too far into the contemporaneity is concretely undertaken in two ways, both operating in an autonomous manner and also with significant differences (Alfier, 2020, p. 82-89): first, through Giovanna Nicolaj’s reflection; second, by the archival diplomatics developing in North America and having Luciana Duranti as its main creator and the International research on permanent authentic records in electronic systems (InterPARES project) as its main research project.

Nicolaj’s thought looks upon the digital documentary domain as an ideal and desirable horizon, that was never actually put into practice. In fact her main concern is to provide theoretical grounds for a conversion of diplomatics to science of history of documentation, from which also the digital document can emerge as a future and legitimate object of study, not at all odd with regard to the disciplinary boundaries (Nicolaj, 1986, p. 330-331; Nicolaj, 2007, p. 11). Consistently with this effort to innovate the discipline’s statute, she has moulded a conception of diplomatics also as a mediation with other disciplines: only by incorporating the contributions by other disciplines, diplomatics can authoritatively offer itself as an exhaustive history of documentation, which is declinable on a wide pattern of historical and geographical coordinates that even include our current society. In particular (Figure 3):

- with the law science, because she acknowledges that the document is structured on account of the pursuance of performative purposes, i.e. of different, multiple and variable legal functions (Nicolaj, 2007, p. 25, p. 58-61), thus

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9 http://www.interpares.org/ [Cited: 3rd September 2021].
laying the foundations for comparing between the diplomatics studies on the digital documentation and the contemporary law science interested in information and communication technologies;

• with the archival science, because she underlines that the performative purposes are achieved not only by the single document, but also by its aggregations, that are the object of study of the archival science. She also stresses that the dimension of records considered as an organic whole – in particular public records – has a significant repercussion in terms of legal and performative effects (Nicolaj, 2007, p. 71-72, p. 220-221). This lays a foundation for a comparison between the diplomatics studies on the digital documentation and the archival science investigating the digital records that are settled, as an organic whole, in the contemporary records management systems.

An even more considerable share in the diplomatics development which, in order to understand the digital document’s structural nature, becomes a “boundary discipline” with an approach to external disciplinary contributions, comes from the archival diplomacy (Figure 3). This denomination immediately indicates that such a current of thought arises out of an archival approach to diplomatics:

archivists have rediscovered the importance of the critical study of the document and turned to diplomatics to test the validity of its principles and methods for [...] contemporary documents. The first result of this careful and laborious research is that the boundaries of diplomatics have met those of archival science, both in terms of time and place to which they are applied and in terms of methodology [...]. There is only one diplomatics which, when used for the purposes of another discipline, becomes one with it, just as does a metal in a metallic alloy. (Duranti, 1989, p. 24).

![Figure 3. Recent developments of diplomatics as a “boundary discipline” along with other disciplines.](image)
What triggers this strong union between diplomatics and archival science, compared by Luciana Duranti to a “metallic alloy”, is represented by an actual need: the North American archivists are beginning to have debates on a series of issues concerning the preservation of digital archives and therefore searching for effective solutions. Not incidentally the InterPARES project, which represents the main heuristic manifestation of the archival diplomatics, has set the essential goal of developing an archival theory for a digital preservation, in full compliance with the fundamental formulation of the traditional archival theory (Duranti, 2006, p. 77). In other terms, the project moves from a precise archival vision: the “custodial perspective” where the digital archives, by the example of the traditional historical archives, are first viewed as a physical, organizational, procedural and logic dimension in which the genuineness of the documents preserved is guaranteed, so that they can be validly destined to the historical research. The solutions to the whole of these needs are elaborated by employing the diplomatics in its most classic statement. It is interpreted by the archivists in North America as a discipline capable of distinguishing the baseline structural characteristics making a document as such, regardless of any analog or digital medium, therefore also capable of providing for instruments for the preservation of digital archives: in fact taking archives into the custody means preserving genuinely the single documents comprising them, which in the final analysis corresponds with preserving all those basic structural characteristics making documents as such (Duranti; Preston, 2008, p. 139), so as not to permit the alteration of their essential nature.

This horizon, connotating the development of the archival diplomatics, accounts for the reason why, above all through the InterPARES project and starting from a strict structural analysis of the digital record, it succeeds in reinterpreting the traditional diplomatics method for the documentary genuineness appraisal which, as outlined above, suffers from a few critical issues in the wake of the development of the digital documentary domain. Such a reinterpretation occurs in the light of a precise awareness:

in the electronic world, the fragility of the media, the obsolescence of technology, and the idiosyncrasies of systems likewise affect the integrity of records. When we refer to an electronic record, we consider it essentially complete and uncorrupted if the message that it is meant to communicate in order to achieve its purpose is unaltered. This implies that its physical integrity, such as the proper number of bit strings, may be compromised, provided that the articulation of the content and any required elements of form remain the same. (Interpares, 2001, p. 20).
This is to say that, on account of the high dynamicity that is connatural with the digital document, its genuineness cannot be adapted to an absolute stability, but rather to a relative one: some non-basic aspects can vary, in the wake of technological requirements, while other key aspects qualifying the document and its performative content as such should be strictly preserved. In fact the InterPARES project adopts this guiding principle to recognize that the digital archives, as a dimension to ensure the genuineness over time of the digital documents taken into their custody, should substantially proceed with sacrificing them as originals, and assure the continuing capability of generating genuine copies from them, that are used within a certain timeframe to derive further copies just as genuine. It is an endless process, marked by the rapid obsolescence of technology that sooner or later causes the forced migration of the digital components that, up until a certain date, have guided the digital documentary representations in an intelligible manner (Interpares, 2002, p. 3-4).

Moreover, it should be highlighted that the archival diplomatics has proceeding through research clearly empirical in nature, where the structure solutions are first derived from the diplomatics’ conceptual background, but then they are constantly tested in the light of the specific cases and phenomena most widespread in the domains of the digital documentation and the information and communication technologies. So, this approach inevitably creates connections between the archival diplomatics and the specific contributions by the computer science, that on the other hand reinforces the propensity of the contemporary diplomatics to act as a “boundary discipline” (Figure 3).

In consideration of the path that has already been tracked by the discipline’s most recent manifestations, what is desirable in terms of its interest in the digital documentation research? We definitely wish this path to continue along the same direction, on one hand by enhancing the connection of diplomatics with the pertaining contributions by other sciences, and on the other hand by composing the reflections, that have so far independently animated the two disciplinary perspectives here examined, in a more coherent and organic structure.

References


