



Article

Barry Smith, Olimpia Giuliana Loddo and Giuseppe Lorini* On Credentials

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Abstract: Credentials play an important role in all modern societies, but the analysis of their nature and function has thus far been neglected by social philosophers. We present a view according to which the defining function of credentials is to certify the identity and the institutional status (including certain rights) of individuals. More importantly, credentials enable rights-holders to exercise their rights, so that for a particular right to be exercisable the right-holder should possess, carry and sometimes show to an authority a document of a specific kind. Driving licenses, identity cards, passports, boarding passes, library passes, credit cards, ATM cards, health insurance cards are all examples of credentials in this sense. Credentials have in every case a bearer, and the bearer should be able to carry them easily on his or her person. Credentials should also be inspectable – not least because credentials can be forged. The authors analyze several historical and contemporary examples of credentials, focusing on the credentials carried by the pilgrims of the Way of Saint James.

Keywords: credentials, document acts, deontic powers, Way of Saint James, institutional objects, status indicators

1 Introduction

Credentials are documents we are required to have in our possession in order to achieve certain ends. For instance identity cards, driving licenses, passports, credit cards. A credential in this sense is, for example, a boarding pass which we need to board a plane, or the machine-readable access badge we need in order to

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gain entry to the building where we work, or the supermarket club card we use for shopping.¹ In some countries, at least, police controls are mounted to check that persons are carrying the requisite identity documents when passing through certain areas, and similar controls are mounted at airports and international borders.

Credentials are currently made largely of paper or plastic. But in a process that is only now beginning to gain traction, many of the paper and plastic documents we have become accustomed to using as credentials are being replaced by electronic documents stored inside our phones. The credentials themselves survive, but now in electronic form. And we will still need to carry them around with us even after the point where our wallet has been replaced by a wallet app.² In what follows, therefore we use the term “credential” to refer equally to both paper and plastic documents and their digital substitutes.³

What follows is an exploration of the ontology of credentials, and of the acts that we perform with their aid. As we shall see, people use documents not only to store, display and transmit information but also to bring about a variety of further ends. Credentials thereby extend the scope of what we can achieve through the performance of mere speech acts. We follow Smith (2011 and 2014) in calling such performative uses of documents “*document acts*”.⁴ And as we shall also see, credentials often fulfill simultaneously a variety of purposes.

1 Other examples of credentials are library cards, parking passes, bus passes, conference badges, bank savings books, national insurance cards, boating licenses, pension books, gun licenses, the French *livret de famille*, sheriff’s badges, military rank insignia, and doctor’s prescriptions.

2 See Smith (2014).

3 Thus, not all the documents that we are required to carry are credentials. In Italy, for instance, to combat tax fraud customers are required to retain the receipt in their possession upon leaving a restaurant. This is in order to allow it to be checked by the tax authorities, who for this purpose subject restaurant customers to random searches. Failure to present the receipt would result in a fine on the part of both customer and restaurant owner. Here, possession of the receipt does not bestow any right upon the possessor; rather it provides protection against being subject to a fine.

4 By ‘document act’ Smith (2014, 19) means “*what humans (or other agents) do with documents, ranging from signing or stamping them, or depositing them in registries, to using them to grant or withhold permission, to establish or verify identity, or to set down rules for declaring a state of martial law.*” According to Smith, “acts of these sorts deal with documents in ways which reflect the status of the latter as documents (rather than as, for example, mere pieces of paper). Thus the coverage domain of the theory of document acts does not include, for example, burning old manuscripts to keep warm”.

2 What are Credentials?

The term “credential” derives from the medieval Latin “*credentialis*”, meaning “giving credence to” (from the Latin “*credo*” – “I believe”).⁵ The Oxford English Dictionary defines “credential” as a “document or certificate proving a person’s identity or qualifications”.

Credentials are not solely linguistic artifacts (indeed we shall see that they are in some cases wordless, see section 3.3). In addition to the information they convey, they also have a material substratum that plays an essential role in the performance of the document acts in which they are involved. This is because, as we shall see, the *possession of* and *control over* a material object is a felicity condition (in Austin’s sense) of the associated document acts.⁶ The material object may serve in this capacity either through being offered for inspection, as when you hand your passport to the border control officer, or by serving as the channel for signals, as when you hold your watch over the QR code scanner at the gate when entering a secure area.⁷

Yet although we need to prove our status as rights-holders using credentials in order to enjoy the associated rights, it is not the credentials themselves that provide us with those rights. Credentials are not “status-making” or “rights-making”. Indeed, to follow the terminology proposed by Hohfeld (1919), credentials provide us with certain *legal advantages*; for example, your passport confers new advantages when a visa stamp has been entered.

Because credentials typically have nothing to do with the *genesis* of the rights they grant to their possessor, they are connected not with the *having* of a right but rather with the *exercise* thereof. It is generally a necessary condition of acquiring a credential that one possess already the right that the credential certifies. It is important here to distinguish between “being the holder of a right” and “having the deontic

5 Curiously, the term ‘document’ has a very similar etymology, since it comes from the Latin “*documentum*”, meaning proof or demonstration. The expression “*documentum dare*” means “to provide proof” or “to demonstrate”. On documents as instruments of verification, see Immerlica et al. (2019).

6 By “possession” we mean the material possession of something, which is to say: the state of having something with you or under your control. “Material possession” connotes a simple factual relation between a person and a thing, as contrasted with the legal meaning of “possession”, which connotes a person’s having a legal power over a thing.

7 Issuing bus or theater or plane tickets is not just a way of allowing the exercise of rights, but also a way of coordinating the plans of many people, for example, by ensuring that seats are still available when they arrive.

power to exercise that right *concretely*".⁸ A right such as freedom of movement may long pre-exist the emergence of credentials that enable the exercise of that right.

The right to travel, for example, is commonly guaranteed by both national and international legislation. For instance, Article 16.2 of the Italian Constitution provides that "Every citizen is free to leave the territory of the Republic and return to it, notwithstanding any legal obligations".⁹ Article 13 of the Universal Declaration of Human Rights provides that "(1) Everyone has the right to freedom of movement and residence within the borders of each State. (2) Everyone has the right to leave any country, including his own, and to return to his country". But it is nowadays only the possession of a passport or other similar credentials that gives the possibility to exercise these rights concretely.¹⁰ If you temporarily lose possession of your passport, then certainly your constitutional right to travel will not, for that reason, disappear. Rather, you will only temporarily not be able to exercise it. Even if your passport is lost or stolen while you are abroad, this does not mean that you are trapped in a foreign country forever because it is no longer possible for you to cross national borders. This is because it is possible to request and obtain a replacement credential. Credentials are documents that can be replaced after a process of legitimation.

2.1 Credentials as Status Indicators

As the OED definition of credential makes clear, since a credential is a "document or certificate proving a person's identity or qualifications" they mainly perform an "epistemic function". In this sense, if we use Searle's lexicon, they can be considered "status indicators".¹¹ Moreover Searle (1995, 210) explicitly mentions

8 Following Searle (1995, 100; 2010, 8f), deontic powers are conventional powers that regulate relations between people. Searle includes in this category rights, responsibilities, obligations, duties, privileges, entitlements, penalties, authorizations, permissions, "and other such deontic phenomena".

9 See Article 23 of the Treaty of Rome on "The Functioning of the European Union" (1957). On this topic, see Muchmore (2004, 328).

10 "Every citizen is free to enter the territory of the Italian Republic and to go out of the territory of the Italian Republic, without prejudice to legally imposed obligation, *using a valid passport or a passport substitute document*" (from Law no. 1185, 1967, article 1; our translation. Italics added).

11 This feature distinguishes credentials from money. Indeed, money is an object of exchange and not an instrument that certifies already existing deontic powers. It is not a status indicator: it is (according to Searle, at least) a status function (Searle 2017). In ontologically more careful terms, an amount of physical money is a deontic artifact that confers powers. Money is not a credential mainly for two reasons: (i) banknotes do not certify anything, they do not say anything about their bearer; (ii) it is true that, as Searle (1995) claims, money gives us a deontic power, but, unlike credentials, it is impossible to exercise the deontic power only by showing a banknote or a coin. If you want to buy something you need to deliver/hand over the money to the seller.

some kinds of credential as examples of status indicators (uniforms, passports, driver's licenses).

According to Searle (1995, 119), the status indicators are “official representations” required by institutional facts, “because the existence of institutional facts cannot in general be read off from brute physical facts of the situation”. As stated by Searle (2006, 21–22): “in order for status functions to be recognized, there typically have to be some sort of *status indicators*, because there is nothing in the man or the object itself that will indicate its status, since the status is only there by collective acceptance or recognition. Thus, we have policemen's uniforms, wedding rings, marriage certificates and passports, all of which are status indicators.”

Status indicators document institutional realities. They make them evident and recognizable, without creating by themselves the institutional reality they represent. Nevertheless, they perform an important role also from the ontological point of view: for instance, according to Searle, “the uniform does not constitute being a policeman, but it does symbolize a status-function; and that symbolization, in some form or other, is essential to the existence of the status-function”.¹² If institutional realities exist in virtue of social recognition, then the tools/instruments that make it possible for us to recognize these realities also play a role in maintaining them in existence. In this sense, “collective recognition is not enough. There has to be official recognition by some agency, itself supported by collective recognition, and there have to be status indicators issued by the official agency” (Searle 2005, 15).

Searle's analysis of status indicators neglects two further important features of this epistemic function. First, that status indicators are also physical entities. And second, that many status indicators play an important role also in the realm of deontic powers. Searle does not realize that those status indicators which are credentials do not only perform an epistemic function (a “status-indicating function”) and the indirect ontological functions mentioned above. They also have the deontic function identified in this paper, namely of making it “possible to exercise a certain right concretely”.¹³

¹² Searle (2006, 22) writes: “Many societies find that they [the status functions] cannot exist without status indicators, as, for example, the proliferation of identity cards and driver's licenses will attest.”

¹³ Credentials do not give you a new (second-order) *legal right* to exercise a (first-order) right. Rather, what they give you is just a *de facto deontic power* to exercise a (first-order) right. Searle comes closest to this insight, when, speaking of Hernando de Soto's highly influential exploitation of the powers of those particular status indicators that are property deeds in developing countries, he asserts that “sometimes the status indicators acquire a kind of life of their own” (Searle 2006, 22). See de Soto (2000).

In conclusion: we can say that all credentials are also status indicators, but not all status indicators are also credentials (for example, wedding rings are status indicators but not also credentials).

2.2 Credentials as Institutional Objects

Credentials can be either valid or invalid. This is because credentials are not mere brute objects, but *institutional objects*. By institutional objects we mean material things with features that exist only in virtue of a system of constitutive rules (Searle 1969 and Znamierowski 1924) and thus only in the context of institutions (Anscombe 1958 and Searle 1969).¹⁴ The *type* of each institutional object is determined by its associated constitutive rules. Examples of institutional objects are: a banknote, a check, a chess piece, playing cards, a traffic sign, a testament (document), a contract (document), a ballot paper, a commercial invoice, a receipt, a graduation diploma, a promissory note, a stone border, identity cards, passports, driving licenses, traffic lights, and so on.

Within the system of constitutive rules that make credentials possible, there are constitutive rules of a particular type, that establish conditions of validity for the entities in question (for example, “The ticket must be validated (a) by being punched in the machine (b) before boarding the train”).¹⁵ Conte (1997) introduced the term “anankastic-constitutive rules” for rules of this type.¹⁶

Some anankastic-constitutive rules impose limits on activities that require credentials, for instance, rules establishing credential-related conditions on certain acts, for example of crossing a border (crosser must carry a passport), traveling by car (driver must carry a driver’s license), and so on. As we have seen, the possession of a credential gives us the deontic power to exercise one or more associated rights. However, at the same time, the anankastic-constitutive rules associated with that right set limits to its exercise.

¹⁴ On Znamierowski’s social ontology, see Lorini and Żelaniec (2016).

¹⁵ See Searle (1969); Gizbert-Studnicki (1975); Lorini (2000).

¹⁶ More precisely, by anankastic-constitutive rules Conte means rules that set a necessary condition for the validity of what they regulate (for example, the rule that establishes that a signature is a necessary condition of validity for a will). Anankastic-constitutive rules are different in kind from Searle’s constitutive rules. Indeed, whereas the latter create new types of institutional entities and therefore make possible new institutional phenomena, the former presuppose the institutional types created by Searle’s constitutive rules and state validity’s conditions for the institutional tokens of these types. Anankastic-constitutive rules work at the level of felicity of acts, to use J.L. Austin’s terminology. For an investigation on anankastic-constitutive rules see Lorini (2017).

In addition, credentials themselves can exercise their function only if they fulfill certain conditions of validity set by the anankastic-constitutive rules. For example, where credentials have an expiration date they cannot exercise their function if they have expired.¹⁷

2.3 Counterfeiting Credentials

As we have seen, each type of credential is associated with a specific type of institutional state of affairs, for example the granting of a right of the corresponding type. You are awarded a degree certificate only after you have acted in accordance with all the appropriate procedures, including passing all necessary examinations and receiving the degree. One way in which a (putative) credential may be invalid is because it was not issued in accordance with the appropriate procedures because of departures from these procedures on the side of either the issuer, or the receiver, or both.

In the case of forged credentials the associated institutional state of affairs typically does not obtain. A forged credential is either a new or a modified artifact designed to look like an authentic credential. Authentic credentials can also be *used* in illegal ways, for example when a twin uses the driving license of his brother.¹⁸

Many techniques have been devised to prevent the forgery of credentials through the use of signatures, through complex and multiply redundant sets of identifying numbers, bar codes or RFID chips, through graphics and photographic and holographic images, and through stamps or seals (which are institutional objects imprinted upon or attached to other institutional objects). Graphic devices can also be used to confer new deontic powers on the possessor of a credential or to

¹⁷ Certain credentials can have some of their functions exercised even if they are no longer formally valid. A first example is the European Health Insurance Card (EHIC), which allows its possessor to receive medical treatment even in another EU member state if this becomes medically necessary. But it can be used *even after its expiry date* to certify personal data, for instance when using cigarette- or alcohol-vending machines. A second example is documented in the Italian Presidential Decree no. 445, 28 December 2000 (D.P.R. 445/2000), according to which it is not necessary to produce certifications to attest to one's citizenship, personal data, or marital status; it will be sufficient to exhibit a valid ID document. The data will be recorded by acquiring a photocopy of the ID document. It is possible to exhibit an expired document if the subject declares in a note on the photocopy that the data certified by the document are unchanged.

¹⁸ A famous example of this illegal use of credentials is the case of the Berlin shoemaker, documented in Carl Zuckmeyer's play *The Captain of Köpenick*, who "confiscated" more than 4000 marks from a municipal treasury while wearing a Prussian military uniform with a captain's insignia. See Kelsen, ([1934]1992, 9).

provide a historical or forensic trail of the functions fulfilled by the credential through time (for example, the hole punched in a bus ticket).

2.4 Credentials as Bearer-dependent, Portable, Inspectable Documents

Connection to a bearer, portability and inspectability are three fundamental characteristics of a credential. *Connection* means that each credential is connected to its own specific bearer;¹⁹ *portability* that the bearer should be able to carry the credential easily on his or her person²⁰ (thus that it be small and light);^{21,22} *inspectability* requires that the credential can be made publicly visible (to a human being, barcode scanner, chip reader). All three characteristics can be realized by wearing the credential, for example as a badge or as attached to a lanyard around one's neck. Generally, credentials should also be immediately recognizable and identifiable as being a credential of the relevant type. Typographical and graphical features of the document are designed to make it easily and immediately identifiable in a single glance, even by someone who does not understand the language of the text written on them.

3 Toward a Typology of Credentials

3.1 Bearer Credentials versus Identifying Credentials

In the typology of credentials we can distinguish, first, between *bearer credentials* and *identifying credentials*. The former does not carry any specific information about the possessor. Examples are a bearer bond, a bus ticket, an (unintelligent)

19 Indeed, some credential (such as credit cards and bus tickets) can be shared, for example between family members.

20 We ignore here artifacts such as car registration plates and mussel stickers, which serve as credentials not for persons but for inanimate objects such as cars or boats.

21 Portability (the *ability* to carry) goes hand in hand with the *requirement* to carry; the latter, however, may be subject to qualified exceptions. In the US, for example, drivers are required to carry their driving licenses whenever they drive; but failure to carry is at worst a minor offense if a valid license is produced within a reasonable period.

22 Portability is commonly considered to be an intrinsic characteristic also of money. An interesting counterexample, documented in Furness, ([1903]2005), is the Rai, or stone money, which are large, circular stone disks used as money in the island of Yap. These stones are too large to move; buying an item with one simply involves agreeing that the ownership of the Rai has changed.

hotel keycard that allows entrance into a specific room or area of the hotel (a keycard of this type plays the same role as a password).²³

Identifying credentials carry specific data concerning their possessor. Thus where generally, for a bearer credential, simple possession is sufficient to prove entitlement,²⁴ for an identifying credential possession is necessary but not sufficient, since the bearer must in this case be identifiable, on the basis of what is indicated on the credential, as the person whose credential it is.

Identifying credentials often include graphical elements, some of which – including fingerprints, photographs, or signatures – serve alongside descriptions of identifying marks to anchor the credential to some specific person and thereby allow the validation of the legitimacy of the bearer. A signature is part of both the textual and graphical content of an identifying credential because it is composed of signs representing letters of the alphabet that also have a peculiar graphic form that identifies its author (Harris 2000).

Legitimation can consist merely in determining the authenticity of the credential (through a set of techniques that are connected to the design of its material substratum). Or it can involve comparison of the data appearing on the credential with the corresponding features of its bearer (this process may also involve calling up data from a central registry. Where some talk of *knowledge by acquaintance* and *knowledge by description* (Russell 1910), the type of knowledge achieved in the latter case, which combines aspects of each of these, might best be called *knowledge by comparison*. The type of knowledge achieved purely through appeal to the fact that the credential is in the immediate physical possession of the bearer might be called *knowledge by co-localization*.²⁵

3.2 Credential Templates versus Credentials Proper

Second, we can distinguish between *credential templates* (which need to be *filled in*), and *complete credentials* (credentials proper), which are the result of such filling in.²⁶ This distinction turns on the fact that many sorts of credentials consist of two sorts of (textual or graphical) content: content that is compulsorily provided for all instances of credentials of the given type; and content that is added in each specific instance. The latter is used to fill in the cells left blank in the former. For

²³ Both usernames and passwords are nowadays commonly referred to as “credentials”.

²⁴ A keycard or a bus ticket can of course be stolen. In that case, it is being used in order to prove something that is not true. The reason for stealing a bearer credential is that it gives the possibility to perform illegally the act that the lawful holder of the credential could perform legally.

²⁵ The idea of co-localization is elaborated by Stjernfelt (2019), who draws in turn on Peirce.

²⁶ The template is ‘unsaturated’ in the terminology of Frege (1952).

traditional types of credentials, the template²⁷ is typically printed; for electronic credentials it is hard-wired into the system through which credentials are generated.

3.3 Credentials with Displayed Text versus Credentials without Displayed Text

Third, we distinguish between *credentials with displayed text*, and *credentials without displayed text*. The root of this distinction turns on the fact that credential documents are still, in our common thinking, assumed to be a textual, linguistic documents, i. e., to include some visually displayed text that specifies the document's function and the bearer's identity. However, some credentials do not show any textual content of this sort. The ink patterns created by the re-entry hand stamps used by organizers of festivals and other special events are examples of credentials without displayed text – wordless credentials – of this sort.

Further examples are badges allowing entry to a building, which may show just a picture representing the bearer. There are also wordless credentials whose specific design contains elements taken from a generally acknowledged symbolology, for example the insignia of rank used on uniforms. Others contain coded content which enables them to activate some specific devices, for example a QR code on a dog collar or an electronic access badge, where the badge reader checks that the badge information is included in the table of authorized badges in the application program and returns a command to open the electronic access badge lock (Champlain 2003, 111–112). Here the credential performs not only a deontic function, but also a forcing function (Norman 2013) or what Searle calls a causal function (Searle 1995, 2010).²⁸

²⁷ The term 'template' possibly derives from the French *templet*, meaning: weaver's stretcher. The more general meaning "pattern or gauge for shaping a piece of work" is first recorded in 1819 (Oxford English Dictionary).

²⁸ By "forcing functions" Norman (2013, 141) means "strong constraints that can prevent inappropriate behavior". Forcing functions work on the basis of the mere physical structure of the associated artifact. For example, "[s]tarting a car has a forcing function associated with it – the driver must have some physical object that signifies permission to use the car. In the past, it was a physical key to unlock the car doors and also to be placed into the ignition switch, which allowed the key to turn on the electrical system and, if rotated to its extreme position, to activate the engine". A similar definition is that of causal function proposed by Searle. By causal function Searle (1995, 41) means a function that can be performed by an object (for example, a nutcracker) solely by virtue of its physical structure.

Table 1: Four Types of Credentials.

Credentials	Bearer	Identifying
<i>with</i> displayed text	bearer bonds bearer shares share warrants	passports ID cards credit cards
<i>without</i> displayed text	military rank insignia hand stamps (to regain access to an event)	a credential without text, but with a picture identifying its bearer and a graphical logo of the issuing institution

Table 1 combines the first and last of these distinctions.

4 The Functions of Credentials

Credentials serve to make someone (or some machine) believe that some proposition is true (this is their epistemic function). But they also fulfill a range of different deontic functions, which makes them in some ways analogous to performatives in the realm of speech acts.²⁹ In the simplest case they enable their possessor to exercise certain deontic powers – for example gaining access to a certain area. In a more complex case a credential may have the function to prevent the exercise of rights by enabling discrimination between different classes of persons. The possession of these negative credentials is not a condition for the exercise of a right but eases the imposition of burdens and obligations by an authority (recall the Nazi *Judenstern*, or the yellow ticket used as substitute passport for prostitutes in the Russian Empire).

In a way, credentials are “deontic artifacts” (like, for instance, traffic signs, roundabouts and traffic lights) since they are material objects that play a deontic role in a way that is intelligible to their (human or machine) addressees (see Lorini and Moroni 2020b).

4.1 Performing Document Acts with Credentials

We can now classify the different kinds of document acts performed with the aid of credentials according to the way they are performed:

²⁹ A credential itself may perhaps be considered as a kind of performative object. See Strother (2000).

- i. *thetic document acts* (from the Greek *thésis/θέσις*, meaning: position-creation), which are performed by creating new documents, for instance by issuing a passport or ID card;³⁰
- ii. *epideictic document acts* (from the Greek *epideiknumi/ἐπιδείκνυμι*, meaning: to exhibit), which are performed by exhibiting already existing documents, for instance producing a passport to cross a border legally;
- iii. *anairctic document acts* (from the Greek *anairesis/ἀναίρεσις*, meaning: destruction), which are performed through the destruction of the material substratum of a document,³¹ for instance when an official destroys a passport to prevent a person from leaving the country.³²

Where thetic document acts have acts such as promising as counterparts in the speech act realm, epideictic document acts correspond to acts such as entering a password, and anairctic document acts correspond to acts of forgiving a debt or waiving a claim.

4.2 Deontic Functions and Causal Functions of Credentials

In general, credentials have a primary deontic function that typically emerges already in the name of the corresponding credential type. We note that a function that is primary for credentials of one type can be secondary for those of another type. For instance, the primary deontic function of an ID card is to allow its bearer to be identified. However, an Italian driving license, because it includes a photograph of the citizen and a stamp or signature from the issuing state administration, can also be used (in Italy) as a substitute ID Card.³³

30 Sometimes the creation of a new document goes hand in hand with the creation of a new “social object such as an easement or an award of damages. Some documents play both a recording and an object-generating role. The issuance of a paper guarantee, for instance, brings a certain sort of right into existence and provides evidence of this right in the future” (Koepsell and Smith 2014, 222).

31 The distinction between thetic and anairctic performative acts is due to A. G. Conte (1994). See also M.-E. Conte (1985).

32 Destroying a document is in this case not a merely physical act (like destroying a physical object out of rage or by accident), for it is an act performed because of its legal consequence (for instance in Italy destruction of one’s ATM card is part of the procedure to close a bank account). Another example: in 1520, Luther launched his revolt against Catholicism by burning his bull of excommunication, the Decretals of Clement VI, and other Church documents with which he disagreed.

33 Circular 300/A/744/13/101/3/3/9 of the Ministry of Interior, Department of Public Security on Title IV of the Highway Code (dated January 25, 2013).

As will be clear from such examples, credentials can simultaneously fulfill both causal and deontic functions. The same goes for a paper bus ticket, whose typographic or graphical features as identified by a physical (human or electronic) scanner allow you (in both the deontic and causal senses of ‘allow’) to board the bus.

5 History of Credentials

5.1 Pre-History of Credentials

Documents contributed crucially to the development of modern civilization (de Soto 2000; Ferraris 2014; Koepsell and Smith 2014), and they played a significant role in this respect already in the Middle Ages, for example in the thousands of peasants’ charters described by Clanchy (1993) representing the granting to English smallholders of title to their land (Smith 2014).

However, the phenomenon of credentials almost certainly dates back much earlier, to the invention of writing itself. For example, in the eighteenth century BC the kings of Mesopotamia adopted a pass system to control the movements of people in their kingdom. Indeed, according to Charpin (2010, 218) many texts indicate that at that time

individuals could not move about unless they were in possession of a pass in good order. After a major invasion of locusts struck the district of Qattunam, in the northern part of the kingdom of Mari, the local governor quoted the order he had received from the sovereign: ‘Any private individual [*muškēnum*] who wants to leave without your permission for the land of Subartum, stop him and have him brought to me’.

The use of credentials for traveling outside a kingdom is also mentioned in the Bible. In the book *Nehemiah*, which dates back to the fifth century BC, Nehemiah asks the Persian king Artaxerxes to be provided with letters of safe passage in order to allow her to cross safely through foreign territories.³⁴

In Roman times, persons traveling on official business were issued with a *tractorium* (a letter) in the name of the Emperor. From the Middle Ages until the

³⁴ These are Nehemiah’s words: “If it pleases the king, may I have letters to the governors of Trans-Euphrates, so that they will provide me safe-conduct until I arrive in Judah? And may I have a letter to Asaph, keeper of the royal park, so he will give me timber to make beams for the gates of the citadel by the temple and for the city wall and for the residence I will occupy?” And because the gracious hand of my God was on me, the king granted my requests. So I went to the governors of Trans-Euphrates and gave them the king’s letters. The king had also sent army officers and cavalry with me.” (*Nehemiah* 2: 7–9).

eighteenth century it was mainly *civil* authorities who granted credentials to satisfy their needs in controlling their territories, in addition to satisfying the needs of travelers. China and Japan started to develop systems of external passports only rather late, since until the nineteenth century they were nations with little interest in international exchange. They too, however, made extensive use of credentials for internal control, since every traveler had to obtain permission to travel from the local lord (Lloyd 2005, 81).

5.2 The Way of Saint James

One lesson that we can learn from the above is that credentials often play multiple roles simultaneously. A single document act performed with the aid of a credential – for example signing one’s passport – can serve multiple performative ends. The phenomenon is illustrated particularly clearly by a still surviving Christian tradition dating back to the Middle Ages, namely the *Peregrinatio Compostellana* (in English: *Way of Saint James*), a network of pilgrimages starting out from various points in Europe and converging on the grave of the Apostle James in Santiago de Compostela in north-western Spain.

The earliest records of pilgrimage to Santiago de Compostela date from the time immediately after the discovery of Saint James’ grave in 813, and the latter was to become one of the most renowned *termini* of medieval pilgrimages, achieving between the twelfth and fourteenth centuries an importance comparable to Jerusalem and Rome. The most common aim of the pilgrim was (and remains today) to receive the forgiveness of sins that is granted upon *completion* of the pilgrimage. The latter has over the centuries increasingly taken on the form of a document act performed with the aid of the religious authorities. This involves a presentation by the pilgrim at the Cathedral in Santiago of (1) him- or herself, together with (2) documents attesting to the fact that the pilgrim had arrived at this destination through an approved route and means.

In addition to its religious-spiritual features, the act of pilgrimage also has social, legal and institutional features in virtue of which the pilgrimage came to be associated with multiple documents attesting for example to the fact that a traveler has completed the pilgrimage. Such proof of completion might be required for example because during certain periods pilgrimages – not only to Santiago de Compostela but also to Rome or to the Holy Land – were imposed on believers as penitential exercises (Granero Gallegos 2010).

In the Middle Ages, the civil authorities were concerned to dissuade vagabondage, and so especially foreign travelers on the pilgrimage routes had to provide a confirmable justification for their journeys. Attestation of status was

needed further because pilgrims enjoyed privileges such as access to hostels set along the way by religious and civil institutions to ensure “a coordinated supply of food, shelter, transport and other facilities” (Stopford 1994). The hostels served also in the process of certifying the pilgrims’ progression along their routes.

Initially, a simple verbal declaration was considered sufficient to prove the status of pilgrim. Later the increasing number of false pilgrims made necessary the creation of pilgrim’s credentials. These were originally quite rudimentary; they could consist in a peculiar outfit, typical of pilgrims, or in the possession of a scallop shell.

The book V (chapter XI) of the *Codex Calixtinus*, an early guide for the pilgrims of Santiago likely compiled between 1139 and 1173 (Pinto Costa 2016), focuses on how *peregrinos* were to be treated when met along the way. Specifically, when a believer meets a pilgrim, the latter “must be received charitably and respected by all peoples. For whoever will take them in and diligently procure hospitality for them, will be hosting not only St James but even the Lord Himself.” On the other hand, the *Codex* also describes sanctions for violators: “Many have met with God’s anger because they did not want to look after pilgrims to St James and the needy.”³⁵

In spite of this, however, the advantages granted to pilgrims were from the very beginning exploited by beggars and other sorts of false pilgrims. The pilgrims thus needed to find ways to identify themselves as “real” pilgrims to the monks, soldiers, and monk-soldiers that were required to support them.

The evolution of the pilgrims’ signs of recognition, reconstructed by Dunn (Dunn 2016), is significant to our understanding of both the historical evolution and the ontological characteristics of credentials. From around 1000, the “real” pilgrim received in the course of an ecclesiastical service two symbols of pilgrimage, a staff and a satchel, which had been blessed by the Church with a particular formula.³⁶ As stated by Dunn (2016, 16), “[t]he Church, through these signs, became the arbiter in what constituted a ‘real’ pilgrim, providing a visual representation for the world to see of the inner, invisible dedication of the traveler to a holy shrine”.

However, it was easy to falsify these rudimentary certifications, and so, beginning in the thirteenth century, they were replaced with *cartas probatorias* (evidentiary letters) (Granero Gallegos 2010). King Phillip II of Spain issued in 1590 a “Decree Against Those Who Walk About in Pilgrim Garb”, according to which

³⁵ Sanctions manifested themselves for example in the form of houses being set on fire.

³⁶ This is the text of that formula: “In the name of Our Lord Jesus Christ, accept the purse, this symbol of your pilgrimage, that you may be worthy to arrive chastened and cleansed at the threshold of St. James. [...] Accept this staff as a support for the journey and for the labor on the route of your pilgrimage, so that you may be able to overcome all the throngs of the enemy and arrive securely at the threshold of Saint James.” (Dunn 2016, 15).

each pilgrim had to carry two documents proving his peculiar status: one from the ecclesiastic and one from the civil authority. The latter certified both the physical description of the pilgrim (so that the person carrying the license could be recognisable) and the itinerary he was required to follow (Dunn 2016).

When crossing into Spain pilgrims accordingly had both to register themselves with local civic officials and to present a letter from their home religious authorities testifying to their status as “real” pilgrims.

5.3 Present-day Pilgrim Credentials

Today, pilgrims receive a passport-type document issued by the Church authorities that provides evidence of their completion of each step of their journey (Figure 1).³⁷ This, however, is a very recent idea. Only in 1987 was the *Credencial de Peregrino* created and approved by the first *Congreso Internacional de Asociaciones de Amigos de Santiago*, held in the Pyrenean town of Jaca, near the border with France (Dunn 2016, 26).

There are two documents connected with the pilgrimage to Compostela: the *Pilgrim’s Credential*, and the *Compostela*, which is the document that the pilgrim receives from the religious authority at the end of his *Camino*.³⁸

The *Credential* has the function both of proving that the owner has the status of a pilgrim and, through the presence of stamps, of certifying that the pilgrim has reached those destinations specified as a necessary condition for the achievement of the *Compostela*.

The *Compostela* is the accreditation of the completion of the pilgrimage, and is obtainable only after satisfying the set of requirements (thus: anankastic-constitutive rules) established in Santiago during the *Jornadas sobre el Año Santo*³⁹ in November 1993. These are also listed on the credential itself, namely: (i) the pilgrimage is motivated by Christian sentiment (*devotionis affectu, voti vel pietatis causa*); (ii) the pilgrim reaches the Tomb of the Apostle after traversing at least the last 100 km on foot or on horseback, or the last 200 km by bicycle and the last km on foot; (iii) the Credential itself is issued by a Church-authorized institution.⁴⁰

³⁷ A similar document is issued at the special terminal created at Jeddah Airport to Muslims performing the obligations of the hajj. This document, however, is issued in exchange for the pilgrim’s original passport, which is returned upon completion of the hajj.

³⁸ A third document, the *Testimonium*, could be obtained after completion of the “reverse” pilgrimage from Santiago back to Rome.

³⁹ In Santiago the Holy Year is celebrated when the Feast of St. James (July 25) falls on a Sunday.

⁴⁰ See <https://oficinadelperegrino.com/en/pilgrimage/the-credencial/> last accessed 5/15/2020.



Figure 1: Two Examples of Pilgrim’s Credentials (The first is a Credential Proper, the second is a Credential Template).

Interestingly, certain maps too, and also yellow signs posted along the official routes, can play an important documentary role for pilgrims (Dunn 2016, 22). The latter serve not merely as aids to navigation but also as *normative drawings* (Lorini 2019; Lorini and Moroni 2020a; Moroni and Lorini 2017) in the sense that they provide instructions which have the force of obligation (Smith 2013). The pilgrim is for example forbidden to deviate from the prescribed route for more than 12 miles in any

direction. The map establishes the sequence of places that the pilgrim has to visit in order to receive in his *Credencial* the stamps needed to achieve the *Compostela*.

6 Conclusions

Curiously, the analysis of credentials has been neglected by social philosophers, including those working in the field of social ontology, and we here provide a first systematic study of a phenomenon that plays an important role in our everyday life.⁴¹

Yet as we have seen, credentials provide a series of clear examples of the way a single document act – for example entering a certain stamp into a hostel passbook – can serve a plurality of performative ends. There emerges from our analysis of credentials a distinction between two fundamental categories of our everyday deontology, namely between “holding a right” and “having the deontic power to exercise that right concretely”.

We believe that our analysis is significant also because, as paper and plastic credentials give way to electronic credentials in your phone, or in an RFID chip implanted in your earlobe, new types of uses for credentials are being invented that are transforming modern societies, uses which involve execution by software. Already credentials stored on your phone can enable you to get a loan, refill a prescription, disclose your medical data, request a car and driver to be sent to your current location, or take control over a car or bicycle or scooter that is left on the street. At the same time, when you use these services the stored credentials will see to it that your credit record/medical record/credit card account are automatically updated accordingly.

As we saw in section 5.1 above, credentials were used already in Biblical times as instruments to control migration flows. Reflecting on the Chinese invasion of Tibet in the 1950s, Pallis (1985, 7) writes:

One of the side effects of modern technology has been to place in the hands of those who control the machinery of government a range of coercive apparatus undreamed of by any ancient despotism. It is not only such obvious means of intimidation as machine guns or concentration camps that count; such a petty product of the printing press as an identity card, by making it easy for the authorities to keep constant watch on everybody’s movements, represents in the long run a still more effective curb on liberty. In Tibet, for instance, the introduction of such a system by the Chinese Communists, following the abortive rising of 1959, and its application to food rationing has been one of the principal means of keeping the

⁴¹ As we mentioned in section 2.1, an important contribution to the ontology of credentials derives from Searle’s research on “status indicators”. The present research on credentials can accordingly also be viewed as a contribution to the ontological investigation of status indicators.

whole population in subjection and compelling them to do the work decreed by their foreign overlords.

With the growth and ubiquity of electronic credentials, the possibilities for such control have of course increased by orders of magnitude. They will manifest themselves both in good ways – for example in allowing more effective means of controlling traffic flows by exploiting the credentials built into our car Wi-Fi and autonomous driving systems – but also in bad ways, by enhancing the ability of the state to control its citizens' thought and behavior.

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