# The Ontology of Documents

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**ABSTRACT.** As is well known, speech acts such as acts of promising can have ontological consequences. For example an act of promising can give rise to a mutually correlated claim and obligation. Increasingly, speech acts in the narrow sense are being augmented by the use of documents of multiple different sorts. In this paper we analyze the results of this augmentation from the ontological point of view, considering especially the domains of law and commerce. We show how document acts are not isolated phenomena, but rather form large and complex systems with other entities, including occurrent entities such as acts of signing and inspecting, as well as speech acts for example of instructing people to sign or complete a document. The paper concludes with a consideration of some of the special problems associated with the use of digital documents, for example as concerns issues of security and provenance.

### 1 Introduction

People do things with documents, not only in order to record information, but also to bring about a variety of other ends, such as establishing credit, creating an organization, recording an agreement, initiating a lawsuit, or promulgating a law [Smith 2011, 2011a]. Where speech acts [Austin 1962, Searle 1969] are events or occurrents which exist in their executions and are survived, at best, in the memories of their participants, document acts yield continuant products – entities which endure through time in a way that allows them to live lives of their own independently of the persons who were involved in their creation. The consequences of this phenomenon in the development especially of the institutions of Western capitalism are only now beginning to be understood.

In his *The Mystery of Capital* [2000], the Peruvian economist Hernando de Soto shows how documents allow commitments made by individuals to be effective, not just through the memories of those with whom they engage in face-to-face interactions, but in enduring, verifiable form that is effective across vast distances. Paper, and what can be written upon paper, and what can be written upon the many interconnected pieces of paper which constitute a complex legal or commercial document, allows ever more creative combinations of productive forces in society to be born and to sustain the mselves

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through time, even beyond the death of the parties initially involved. Wills, testaments, corporations, charities, trusts, international treaties and large-scale projects of engineering and scientific research are all made possible only through this power of documents to allow the transmission of commitments through time and space.

# 2. The Role of Documents in the Creation of Social Objects

At the heart of speech act theory is a thesis to the effect that we can bring about changes in the world through utterances, for example of the form 'I declare thee man and wife'. In *Making the Social World* [2010] Searle gives this thesis an explicitly ontological formulation, as an assertion to the effect that we can make it the case by declaration that a status function – for instance as enjoyed by an official of some institution – exists in the relevant institutional context [Searle 2010, p. 13].

While, for Searle, the basic facts of the world are constituted by the material entities studied by physics and chemistry, these status functions, and all the other parts of the social reality that is created by declaration, 'are dependent on, and in various ways derive from, the basic facts' [Searle 2010, p. 4]. Among these 'other parts of reality' are corporations, laws, investment vehicles, the money in your computerized bank account, and a variety of other quasi-abstract entities which are at one and the same time *subject to historical changes* yet *not made of physical parts*. Many of the entities in question are quasi-abstract also in the sense that they are subject to exact mathematical divisions not encountered in the physico-biological world of nature – as for example when the capital value of a company is divided into 1000 exactly equal parts for division among the company's employees.

Such quasi-abstract entities, as we shall call them in what follows, must have some basis in the underlying physical reality, above all in the actions and memories of the human beings involved, and in the case of document acts, however, this underlying physical reality will include not only documents of one or other kind, but also a range of other kinds of entities that have grown up in their wake.

For as documents have become ever more important instruments of social coordination, new types of document-related artifacts such as offices in office buildings, desks (and now: desktops on your computer), filing cabinets (and now: files and folders on your desktop), alphanumeric identifiers (for people, cars, passports, bank accounts, and for documents themselves), and a range of other accourtements of documentary forms, such as signatures, stamps, seals, barcodes, checkboxes as well as passwords for document access. The rise of documents has given rise further to new document-related social practices, such as the taking of minutes of meetings, double entry bookkeeping and the use of central registries for the recording of commercial transactions and legal decisions.

## **Table 1. Examples of Common Documents**

marriage license insurance card

divorce decree health insurance card

birth certificate health certificate
death certificate medical record
testament criminal record

partnership agreement bank book statute of incorporation pension book proxy form rent book consent form passport

ballot form visa

residence permit accident report
census report theft report
stock certificate police report
insurance claim form charge sheet
insurance policy summons

architect's plan tax form
mortgage agreement pay-slip
bankruptcy certificate diploma

# 3. Document Systems

Most importantly, however, the rise of documents has led to the creation of vast systems of quasi-abstract entities, including the systems of commercial obligations (contracts, titles, collateral, credit, testament, stocks, bills, bankruptcy), of identity tracking (represented in birth and death certificates and public records offices, of visas, passports, consulates and border posts), of legal entities (represented in codes of law, summonses, police reports, court proceedings), and of employment relations (represented in employ-

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ment contracts, pay stubs, tax forms, work orders, performance evaluations, licenses and diplomas).

Each such system comprehends not only documents but also other sorts of document-related entities, such as officials (persons authorized to perform document acts of specific sorts), prescribed channels along which documents can move (for example through a chain of specified officials for inspection and approval), procedures for checking and filling in and storing and validating documents, and also for educating the users of documents. Nowadays this list includes also technical devices for scanning documents and for making them available online including passwords governing different sorts of read and write access. One and the same document may hereby serve multiple successive social acts as it passes through successive recipients. A delivery note fulfils in succession the role of guiding and instructing those involved in delivering an object, of allowing the recipient to attest to its receipt, of allowing the deliverer to document successful delivery, and so forth. The signature on your passport plays three roles simultaneously: in initiating the validity of the passport, in certifying that you attest to the truth of the information represented therein, and in providing a sample of your signature for comparison.

# 4. The Problem of Anchorage

Currently, information systems experts are exploring how to re-create in the realm of digital documents those features of paper documents that are used in ensuring and certifying their security and authenticity. Paper documents such as passports are causally anchored to the human beings who created them through processes such as signing and fingerprinting. Certainly images of signatures and fingerprints can be included in digital documents, but the resultant digital artifact is not the immediate result of a causal process for which the human being which they are used to identify is responsible. How do we anchor digital documents to objects and processes in physical reality in a way that will create a counterpart of this phenomenon of causal responsibility?

This is just one of the ways in which questions pertaining to social reality that are recognizably rooted in the traditional philosophical concern with speech acts and their deontic properties, but which are now reappearing in a transformed form that gives them urgent practical relevance. Analogous questions are arising in the realm of economics, of warfare, of diplomacy. Computers are playing an entity-defining role and opening up new possibilities for human creative ingenuity also in music and the arts, genetic engineering, and cyberwarfare. Ferraris' insight in his book *Ontology of the Mobile Phone* [2005], to the effect that a principal virtue of the mobile phone is that it is able, initially through text messaging, and now through multiple ways in which the phone itself is being used as document in its own right, as credit card, as boarding pass, as identify document, that is

anchored wirelessly to the physical reality (of human beings, bank accounts, servers and transmission technology).

#### 5. Conclusion

The ontology of social reality is an area of considerable interest in contemporary philosophy, above all through the influence of the work of John Searle, most recently in his *Making the Social World: The Structure of Human Civilization*. Searle's ideas in this connection are recognizably rooted in his earlier work on speech acts, and this means that his approach to social reality plays too little attention to the peculiar features of those social phenomena which rest on the various ways in which human beings do things with documents – including digital documents – to achieve their ends. We have only sketched some of these features in the foregoing, as a preparation for a fully formed theory of document acts and of the quasi-abstract entities to which such acts can give rise, which are destined to play a hugely important role in shaping the structure of human civilization both now and in the future.

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