Me and My Avatar: Acquiring Actorial Identity

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Abstract

In this chapter, the authors explore the concept of actorial identity through analysing the construction of legal persons as actors, centred on the argument that there is an ontological separation between living men and women and their legal representations. The authors propose an analytical frame based in part on the games studies literature, wherein actorial identities known as ‘Avatars’ are created by performative declarations that articulate Avatars with Players (living persons). The Avatars act within a bounded ‘Matrix’ while being controlled by Players who are outside the Matrix. In applying the frame to the legal Matrix, the authors distinguish between living persons, natural persons and artificial persons, and introduce the concepts of first-order and second-order Avatars. The authors then employ the analytical frame to model the use of legal Avatars by Apple Inc. and illustrate how cryptocurrency technology enables the creation of Avatars that can transact outside legal systems. The frame also helps explain how autonomous systems could acquire actorial identity and then functionally participate in the legal Matrix.

Keywords: Legal person; corporation; agency theory; legal identity; actor-network; corporate law; games studies; identity; avatar; bitcoin.

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1. Introduction

The question addressed in this chapter is, ‘How does actorial identity come to be and how is it maintained?’ Specifically, our concern is with legal identity, of both humans and non-human actors, such as corporations. In addressing the question, we draw especially on the literature on performativity and on our understanding of games.

Our concern is with agency and the construction of actorial identity within the legal world, which is typically not of central concern in management and organisation studies’ extensive conversation – most notably in institutional theory – about the relationship between actors and institutions. Indeed, the notion that the corporation is fundamentally a legal entity is only explored in the margins of the vast literatures on corporate social responsibility, agency theory and bureaucracy (Crane, Matten, & Moon, 2008; Veldman & Parker, 2012; Veldman & Willmott, 2013). In this chapter, we foreground this legal perspective as our focus is on how legal personhood comes to be.

The concept of legal personhood, for human actors, has been problematised in recent years through the actions of activists (Gardner, 2011) and pro se litigants¹ (Veracini, 2016, p. 145) who see a separation between living men and women and their legal representations. Strange as this may seem, such a separation is supported by the existence of ‘non-persons’, or ‘stateless people’ in various parts of the world who are sometimes unable to utilise public services due to a lack of a legal representation (Sawyer & Blitz, 2011). Two United Nations Conventions sought to grant legal status to those who are not nationals of any country and to address some of the causes, but their recommendations have only been ratified by a few countries (Berkeley, 2009). In practice this means that, despite being very much alive and capable of trade and activity, stateless people often lack the capacity to interface with legal and economic systems. In this sense, they resemble US slaves prior to the passing of the Fourteenth Amendment (Stein & Bauer, 1996), as well as many indigenous tribes in recent years (Bosselmann, 1997; Bryant, 1992) and aboriginal people in Australia prior to 1967 (Manderson, 2008). Political upheaval and expulsion can also result in legal personhood being removed from those who possess it (Stein & Bauer, 1996). In exceedingly rare instances, legal process can render a living man or woman’s person legally deceased (BBC, 2013a, 2013b; Rawle, 2015) and therefore unable to interface with aspects of the legal system, a condition similar to the archaic practice of monks and certain convicts being considered ‘civilly dead’ (McLennan, 2011). Meanwhile, being dead is not, in itself, an impediment to holding property, suing, or being sued; long after a man’s death, his estate can continue to operate (Wall, 1996). All of this indicates that legal personhood is not an innate quality immanent to all by virtue of being human. It would therefore be a simplification to suggest an isomorphic, one-to-one, correspondence between living human men and women and the means by which they are represented within a legal system. Instead, a separation is evident between the physical world and the legal system where the latter works with representations of the former, and that work simultaneously constitutes the world in a dynamic, self-referential, autopoietic system (Luhmann, Ziegert, & Kastner, 2004).

¹ Parties representing themselves in court without professional legal assistance.
What then is the legal understanding of a ‘person’? For Osborn (1927, p. 208), a ‘person’ is ‘the object of rights and duties, that is, capable of having rights and of being liable to duties’. Our argument, based initially on the empirical cases above, is that the legal person should be distinguished from the living person (who we can presume has a conscience and a will) and that the legal person is best conceived of as an avatar, which we understand as a medium through which the will of a living person is expressed. The representational dimension of legal personhood is perhaps more evident with corporations, which have been characterised as ‘A new form of spectral life … a reified creation, building on an emergent representation of the aggregation of individuals’ (Veldman & Parker, 2012, p. 418), which have ‘become endowed with an (agential) capacity which empowers them to own other legal entities’ (Veldman & Willmott, 2013, pp. 608–609). Part of our argument, however, is that the legal personhood of living people is also representational.

Just as analyses framed around real-world laws and practices are applied to digital simulations (Balkin, 2004; Westbrook, 2006), the logic of games can be extended to understand the real world. In the next section, we move to this more familiar domain of games where avatars are commonplace. Here we will develop the four key concepts of our analytical frame, the merits of which we demonstrate through a number of empirical examples.

2. A World of Games

The games studies literature is especially helpful in understanding the nature of actorial identity and provides the basis for our analytical frame. Games are a particular form of play, which Huizinga (1955), in his seminal Homo Ludens, depicted as central to understanding culture and necessary for civilisation. Contrary to a long-standing view of play as trivial, Huizinga argued that play was foundational to the human condition and should therefore be treated seriously. For him, the arts, religion, sports and war are all forms of play: ‘Play cannot be denied. You can deny, if you like, nearly all abstractions: justice, beauty, truth, goodness, mind, God. You can deny seriousness, but not play’ (Huizinga, 1955, p. 3). We find a similar foundational view of play in Simmel’s writing, in that his notion of ‘sociability’, which he saw as the primary process of society, is most manifest in play and art. Sociability, he says, is the ‘playform of association’ and like play ‘sociability in its pure form has no ulterior end, no content, no result outside itself ’ (Simmel & Hughes, 1910/1949, p. 255). Moreover, game playing has a broad cultural and social presence, with commentators using the metaphor of the ‘game’ for virtually every kind of human activity, including politics (Cox & McCubbins, 1986), business (Carr, 1968; Stack & Burlingham, 1992) and the market (Hamilton, 2009). Games were also central to Wittgenstein’s (1953) thinking, with the similarities between games and languages leading him to develop the important concepts of ‘language games’ and ‘family resemblance’.
While play can take many different forms (Caillois, 1961), our focus is on games rather than the more general phenomenon of play. Moreover, we are concerned with a particular form of game, namely those games that involve an avatar. For example, the game of wrestling does not involve an avatar while virtually all board and video games do. One such game is the well-known game of Monopoly, where each player selects an avatar – which might be a tiny iron, hat, car or other such token – that represents the player throughout the game.

The growth of online games, video games and social media sites has created a new interest in digital representations or avatars (Aboujaoude, 2012; Bessière, Seay, & Kiesler, 2007; Suler, 2004; Yee & Bailenson, 2007). In their study of simulated online worlds, Davis, Murphy, Owens, Khazanchi, and Zigurs (2009, p. 93) distinguish between ‘People’ as the users of the system and ‘Avatars’ as the representations that symbolise them within such systems. For ‘People’ we substitute ‘Players’ (Westbrook, 2006) and hereafter we will capitalise ‘Player’ and ‘Avatar’ – much as capitonyms are used within legal terminology – since they are two of the four central concepts in our analytical frame (the other two being ‘Matrix’ and ‘articulation’).

This frame is informed by the literature on performativity, which is an important feature of board games and is especially relevant for our inquiry into the nature of actorial identity. We understand performativity as set out by the philosopher J. L. Austin who used the term ‘performative’ to describe utterances that do something. As Austin (1970, p. 235) put it, ‘if I say “I apologize” or “I name this ship the Queen Elizabeth” or “I bet you sixpence it will rain tomorrow” then “in saying what I do, I actually perform the action” ’. However, the social context dictates whether a statement is actually performative or not; for instance, just because I say, ‘I am the King of England’, does not make this so, nor does it mean I will be believed. Thus, for an utterance to be performative it must have legitimacy, and what is and what is not legitimate is always context dependent (Suddaby, Bitektine, & Haack, 2017). In turn, legitimacy is best seen as the outcome of a self-referring system of practices and beliefs that are mutually validating and sustaining (Barnes, 1988; Luhmann, 1995).

Games are rife with performative declarations. An example from Monopoly would be Mary, at the start of the game, declaring, ‘I will play as the iron’, or John, after landing on Trafalgar Square, saying, ‘I’m buying Trafalgar Square’. Neither of these statements are likely to be legitimate or be believed outside of the game, and indeed in the game itself they only make sense in particular contextual situations. For instance, John’s statement will not be performative if Michelle has already bought Trafalgar Square.

The next concept we introduce is the idea of the Matrix. In essence, a Matrix is a particular instantiation of a game, though we prefer the term Matrix rather than game because, notwithstanding Huizinga’s urgings, the latter still evokes a sense of the trivial. In addition, the word ‘game’ is too suggestive of game theory and competition (even though some games can be cooperative). We also prefer Matrix because its etymology implies an important generative potential (the word is derived from the Old French word matrice meaning ‘womb’ or ‘uterus’, and from the Latin word mātrīx meaning ‘breeding female’; ‘matrix’ and ‘mother’ share the
same etymological roots). So, to follow our earlier example, one Matrix is one particular iteration of a game of Monopoly.

We distinguish our concept of a Matrix from Huizinga’s (1955, pp. 10, 13) well-known concept of a ‘magic circle’ which he saw as a boundary separating play from ‘ordinary life’. Crawford (1984, p. 7), writing about computer games, explains Huizinga’s idea more explicitly, by asserting that:

*a game is a closed formal system that subjectively represents a subset of reality .... By ‘closed’ I mean that the game is complete and self-sufficient as a structure. The model world created by the game is internally complete; no reference need be made to agents outside of the game.*

Importantly, the boundary of the Matrix is not coincident with the ‘magic circle’ in that the Matrix only includes the internal environment of a game or other simulated world. Crucially, while the Players are inside the magic circle, they do not enter a Matrix, but rather remain outside of it and are represented within the Matrix by an Avatar. Therefore, the term ‘Matrix’ cannot be applied universally to all circumstances, but rather describes only those systems, games or simulations with an internal environment that is so structured and ordered as to enable the creation or selection, by Players external to it, of an identity through which they can act by proxy.

Different Matrices are at once separated and linked ontologically in so far as they cohere around and are energised by a distinct ‘collective intentionality’ (Searle, 1990). For example, while each individual iteration of Monopoly is unique, it is energised and framed by the collective intentionality behind the game, which is itself recursively regenerated through playing, yet another, game of Monopoly. Thus, the collective intentionality behind the Matrix – assuming it is not being created de novo – determines its boundaries and parameters as well as the capacities of Avatars within the specific context of the game. However, a key property of Matrices is that each iteration of a Matrix, unless otherwise facilitated, is a closed world unto itself. The playing pieces are bound within a game of Monopoly, unable to move outside of the board which serves as its boundary.

When a new game of Monopoly begins, a new Matrix comes into being, and the Avatars that populate it have their existence only within that Matrix. When the iteration of the game comes to an end, the pieces no longer serve as Avatars and that Matrix ceases to be.

Thus far, we have introduced three of our key framing concepts of Player, Avatar and Matrix. To these nouns we now add the verb, to articulate, which we employ because it embodies three pertinent meanings: to ‘express in words’; ‘to join, to attach by joints’; ‘to set forth in articles’ (Online Etymology Dictionary, 2016).

1. **express in words**: In many instances, the action of electing to act as a particular Avatar will be expressed by a performative statement such as ‘I am Joe Bloggs’ or ‘I am playing as the top hat’.

2. **to join, to attach by joints**: Whereby one actor is joined to another, much as in the theatre, where a mask is placed on the face of an actor to convey that their words are those of the character represented. In the legal domain (Matrix) the word ‘joinder’ means ‘Joining or coupling together;
uniting two or more constituents or elements in one; uniting with another person in some legal step or proceeding’ (Black, 1891, p. 650).

3. *to set forth in articles:* Again, with reference to the legal domain, this can be considered a point of performative creation; the articles of association of a corporation are subscribed by its members and ‘create the corporate union between them’ (Black, 1891, p. 92).

We first focus on the articulation between the Player and his or her Avatar, as exemplified in the game of *Monopoly*. That articulation is initially realised, for example, when a Player, Mary, performatively declares, ‘I will play as the iron’. Similarly, in online games and social networking websites, a user (Player, in our language) must register an account, and, in doing so, acquires a means to interact – an Avatar – within the system (Capin, Pandzic, Magnenat-Thalmann, & Thalmann, 1999). More broadly, once this performative declaration – whether it be an utterance or textual registration – is accepted then the Avatar is authorised to be part of the game, while the Player–Avatar articulation becomes part of the Matrix (see Fig. 1). Thus, rather than seeing actors as antecedent to action, we see actors as initially constituted through action, or, more precisely, through performative utterances.

Once the game starts, interactions take place between the Avatars – the hat, iron, car, etc. – and in this sense the players are outside the game. To understand this counterintuitive idea, it is worth remembering that players cannot physically enter a computer game, and therefore can only act via a ‘representational device [which] stands proxy for what (or who) it represents’ (Lynch, 2014, p. 324). But an ontological distinction remains between the representation and that which is ostensibly represented (Barad, 2003, p. 804). Strictly

![Fig. 1. Player, Matrix, and Avatar.](image-url)
speaking, Players are not part of the game even if their Avatar carries their name, and their only capacity to act is through the medium of the Avatar. By way of illustration, consider the situation where a Player needs to retire in the game of Monopoly, and, to keep the game going, another steps in to take that Player’s place. In this situation, the Avatar of the playing piece is, in effect, withdrawn (or disarticulated) from one player and articulated to another. This situation intriguingly resembles that where an ambassador presents their ‘letter of credence’ (allowing them to represent their government to a foreign power), while also presenting a ‘letter of recall’ to the previous ambassador. We now pull these elements together into a single analytical frame (Table 1).

**Table 1. Analytical Framework.**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Example</th>
<th>Our Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avatar</td>
<td>A playing piece (in a board game).</td>
<td>A representation or vehicle/agency through which another acts, whether in a legal, economic or virtual sense.</td>
</tr>
<tr>
<td>Player</td>
<td>A game participant (in a board game).</td>
<td>A physical living human being, as distinguished from a representation, or agency.</td>
</tr>
<tr>
<td>Articulation</td>
<td>The act of a Monopoly Player expressing the intention to ‘play as’ the top hat.</td>
<td>The formal declaration or acknowledgement that an Avatar is (or represents) a Player (or other Avatar). Also the moment of creation, when an Avatar is called into being.</td>
</tr>
<tr>
<td>Matrix</td>
<td>A game of Monopoly.</td>
<td>The domain within which Avatars exist and act.</td>
</tr>
</tbody>
</table>

An online system – whether a game or a social networking website – provides another useful illustration of these concepts. Much like a Monopoly board, this constitutes a Matrix within which interaction can take place between previously disconnected actors. The performative articulation (creation) of an Avatar within social media networks typically occurs through registration of an account identified by a username, along with a password. The holder of this data is able to utilise the account as an Avatar. Players are not, themselves, within the system, even if their Avatar carries their name; yet they have the capacity to act within it through the medium of that Avatar. Such Avatars are not self-contained entities freely existing, but rather bounded nodes within the Matrices in which they are articulated. A social media account exists within the social media Matrix; a computer game character exists within the Matrix of the game, and, we argue, a legal person exists within a legal Matrix.

### 3. Applying the Analytical Frame to a Legal System

We now consider how actorial identity is constructed in a legal system through applying this analytical frame. To begin, we note the important distinction between Living People and Natural Persons, which is essentially equivalent to our distinction between Players and Avatars. When we speak of legal personhood broadly, we
understand this as the capacity to interface fully with a legal system, to hold property and avail of public services. In this respect, within the UK legal Matrix legal personhood is not acquired when a baby is born but rather when the birth is registered in the Register of Live-Births (The Registration of Births and Deaths Regulations, 1987). This registration is a performative status function declaration (Searle, 2006) that articulates the living, breathing baby to its Avatar within the UK legal Matrix. A certificate, known as a ‘Birth Certificate’, is then issued, evidencing the entry and the existence of the resulting ‘Natural Person’ within the UK legal Matrix.

While there are checks and balances which seek to ensure that any Natural Persons map isomorphically to the real world (i.e., Living People), these cannot efface the representational nature of legal personhood. Much as social networking websites seek to limit each user to one account, the exceptions to these practices illustrate this point, such as the recently reported case of a woman who was issued three birth certificates from different countries (Ireland, the United Kingdom and the United States) (Robinson & Buchanan, 2018).

 Conversely, there was a British girl, born in Spain, whose birth was not registered at all, who was described by her father as ‘[having] absolutely no identity in the eyes of the law’, adding that ‘It is as if she does not even exist’ (Levy & Chapman, 2011). This is not to say that those without birth certificates have no legal protections, but they lack full legal personhood in so far as they can be unable to secure a job, receive social security payments, open a bank account, vote, buy or inherit property, as well as having difficulty obtaining identity cards or a passport (UNICEF, 2013a, p. 12). While there are some provisions in the UK for someone born in the country, whose birth was not registered, to obtain a passport, these mechanisms amount to the retroactive creation of a similar record to the registration of a live birth, and still require confirmation from the General Register Office, which administers birth registers (HM Passport Office, 2012). In other countries such practices vary, and while the registration of births is a common worldwide institution, both fundamental to legal systems and enshrined in international treaties, as of 2013 the births of one in three children under the age of five (almost 230 million people) had never been registered (UNICEF, 2013a, 2013b). Where a birth is registered, this is ‘part of an effective civil registration system that acknowledges the person’s existence before the law’ and can be considered ‘the beginning of the legal contract between the individual and the State known as citizenship’ (UNICEF, 2013a, p. 11). This, we see as analogous to the use of an Avatar within the game of Monopoly, and so we proceed on this basis, so that a Player, being a Living Person, interfaces with a legal Matrix via the Avatar of a Natural Person, which is articulated by the registration of a live birth.

It is important to note that some litigants’ attempts to separate living people from their legal representations have been firmly rejected by judges. The Canadian case of Meads v. Meads (2012, ABQB 571) is an illustrative example, as in that case Judge Rooke explicitly confronted what he termed the ‘double/split person argument’ whereby litigants present two, or multiple, legal personalities in an attempt to avoid legal obligations. The judge detailed a range of arguments that those styling themselves Freemen-on-the-Land, among others, have mobilised in court, but, for our purposes, his main contention is that a court cannot and will not recognise one litigant having two quite separate legal identities.
Typically, one of these is a registered Natural Person (Avatar), while the other might be viewed as an attempt to render the Player behind it manifest in the legal Matrix, as an actor separate and distinct from his Avatar. In his judgement, Rooke cited a previous case where the judge adjudicated upon a litigant’s attempt to argue before the court that he embodied two legal persons acting in different capacities. This claim, the judge described as being one of two things:

(1) an inadmissible division of his indivisible entity, or (2) an attempted creation of a second entity in a fashion which is not recognized by law, the result of which amounts to nothing in the eyes of the law. (Meads v. Meads, 2012, paragraph 422, original emphasis)

In effect, this is similar to a game of *Monopoly* where a Player attempts to unilaterally create for themselves a second playing piece (Avatar) in the middle of a game, or to place their fingers on the board and treat these as an additional Avatar. Neither of these actions would be seen as valid as they would violate the rules or boundaries of the Matrix. Thus, it is not our intention to challenge the type of reasoning set out by the judge in Meads v. Meads. Rather, our point is that legal Matrices, akin to games, follow their own internal logic and rules, which are applicable to the Avatars based within them. This is true of Natural Persons, as well as other legal Avatars.

We find similar dynamics to the relationship between Players and Avatars in the practice of financial reporting. Here, financial reporting representations signify aspects of the world, but must maintain the fiction that the representations are the things themselves. While an entry in a financial statement might indicate that a firm owns, say, a motor vehicle, that entry is not the vehicle itself. When the Financial Accounting Standards Board proposed a new protocol whereby one term would be used for such a representation (‘assets’) and another for the real-world things that these represented (termed ‘economic resources’), it caused confusion, as to simultaneously describe something by different, competing, terms split apart signifier and signified in such a way as to negate their function (Hines, 1991, pp. 321–322).

While Players are represented within a legal Matrix by a Natural Person, there is another kind of legal person that does not correspond directly to a registered live birth. These are termed ‘Artificial Persons’ by legal systems. Osborn (1927, p. 208) makes this distinction clear, saying – using our terminology – that in a legal Matrix, Avatars (persons) ‘are of two kinds, natural and artificial’; the former (Natural Persons) represent a Living Person while the latter (Artificial Persons) do not.

An example of an Artificial Person would be a UK registered company. These are not created as a result of the registration of a child’s birth, and indeed do not correspond directly to any Living Person. However, the articulation of such an Artificial Person occurs via a similar process to that followed for a Natural Person. In most common law jurisdictions, this is done through an application (by a Natural Person) to the central register of companies (in the UK, this is administered by Companies House). At the time of writing, the

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2 The Small Business, Enterprise and Employment Act (2015) mandates that all directors of UK corporations must be Natural Persons, as opposed to Artificial Persons, however as of the time of writing its commencement has been delayed so that it is not yet in force.
standardised form for such applications is known as an *IN01 Application to register a company*. The information provided includes the proposed name of the company, the registered office address and the names and addresses of proposed officers. For directors, their month and year of birth are also required.

If the application is accepted and processed, an entry is made in the Companies Register and a Certificate of Incorporation is then issued by the registrar of companies, evidencing this entry. Such a certificate identifies the name of the company as well as the date and place of registration. Thus, as Searle (2006) puts it, a corporation is constructed

*so to speak out of thin air. Thus, by a kind of performativ[e] declaration, the corporation comes into existence, but there need be no physical object that is the corporation.* (p. 22)

The parallels with the process by which a Natural Person is registered indicate that both categories of Avatar share some common attributes at least in their formation. In the UK, both a birth certificate and the certificate of incorporation of a company include the name of the entity registered, the date of registration, the place of registration and a number corresponding to that entry in the register. The application forms also require the names of Natural Persons responsible for the legal person being registered (whether the names of the mother and father, or the company’s officers), and these responsible persons subsequently exercise administrative powers for the legal person registered (as parents or company officers). In official communications, both Natural Persons and Artificial Persons will identify themselves by a name and address, as well as possibly by a registered number such as a National Insurance Number, or Company Registration Number, depending on the nature of the communication. Due to these similarities in form and in the manner by which these actorial identities are articulated (created), we model both Natural Persons and Artificial Persons as Avatars within a legal Matrix. However, it is important to note that they are not of equal nature.

While measures are in place to ensure that Natural Persons are broadly isomorphic with the Living Persons that they represent, no such isomorphism is required or expected between Artificial Persons and the Natural Persons who register and operate them. That is, while it is rare for one Living Person to have more than one Natural Person, such as in the case of the UK woman with three birth certificates (Robinson & Buchanan, 2018), it is quite common, and accepted practice, for one Natural Person to be a director of multiple companies.

Veldman and Parker (2012, p. 417) identify Natural Persons as the building blocks of legal systems, while describing a corporation as a ‘legal reified representation’. We see this as an apt metaphor, as the registration, or creation, of a corporation in the United Kingdom, Ireland and most western countries, can only take place via the use of a pre-existing Natural Person, which is why Bayern (2015, p. 112) refers to the corporation generally as a ‘legal alter ego for natural persons’. We therefore identify the corporation as a second-order Avatar, being two degrees separated from the initial actor – the Player. Table 2 seeks to clarify these ideas.

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Here, the terms ‘first-order Avatar’, ‘second-order Avatar’, etc., do not refer to inherent and absolute properties of a category of legal person. Rather, they describe their relative position in respect to another.

Table 2. Examples of First- and Second-Order Avatars in the Legal Matrix.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Examples</th>
<th>Legal Person</th>
<th>Feels Pleasure/Pain</th>
<th>Our Terminology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living person</td>
<td>Jane, Joe</td>
<td>No</td>
<td>Yes</td>
<td>Player</td>
</tr>
<tr>
<td>Natural person</td>
<td>Miss Jane Doe, Mr Joe Smith</td>
<td>Yes</td>
<td>No</td>
<td>First-order Avatar</td>
</tr>
<tr>
<td>Artificial person</td>
<td>Corporation, Trust</td>
<td>Yes</td>
<td>No</td>
<td>Second-order Avatar</td>
</tr>
</tbody>
</table>

Player or Avatar, or what might be termed degrees of separation. So, rather than communicating specific fixed positions for corporations, Natural Persons or other categories of legal person within the analytical frame, these labels are a function of the number of intermediate Avatars between an initial actor and the subsequent Avatars described.

To illustrate, if we start from the perspective of a living woman (the Player), her first-order Avatar would be the Natural Person that represents her in a legal Matrix. If that Natural Person, Miss Jane Doe, were to register a company (articulate an Avatar), called Company Limited, there would be two degrees of separation between the living woman and the company; hence, we would describe the company as a second-order Avatar, and the Natural Person as a first-order Avatar, in a chain that would run as shown in Table 2. Similarly, if the analytical frame were applied to describe the perspective of a holding corporation, as the starting point in a chain, its direct subsidiary would be labelled a first-order Avatar, with subsequent subsidiaries in orders below that.

Such chains are not permanent, of course. If Jane wished to sell the company to Joe and for him to take over the running of the company, the actions would be conducted via their first-order Avatars. Miss Jane Doe would resign as director and transfer her shareholding to Mr Joe Smith, who would appoint himself as director of Company Limited. We would describe this latter action as Joe’s first-order Avatar being articulated with a second-order Avatar (the company). As the opposite occurs for Jane, we would describe this as Jane’s first-order Avatar being dis-articulated from a second-order Avatar.

While Jane is able to use her first-order Avatar, a Natural Person, to perform these actions, if she wished to sell this, too, to Joe, she would not be able to do so in a manner recognised by a legal Matrix, as there would be no Avatar she could use to sell it, and in any case, due to the rules of the legal Matrix it would not be recognised as something that Joe’s Natural Person could ‘own’, while contrastingly it is permitted to own shares in a company. However, it would be possible for Jane to transfer control of the Avatar to Joe.

One way to do this would be directly, by simply providing Joe with the means he would need to operate her Avatar, such as passwords, keys and identification documents. However, this would not be recognised within the legal Matrix and where photographic identification or other checks were involved, some functions would not be possible for Joe in this capacity. Another way would be via a mechanism recognised within the legal
Matrix – the granting of a power of attorney. In this way, Jane could act through her first-order Avatar, Miss Jane Doe, and grant a power of attorney to Joe’s first-order Avatar. This would give Joe indirect control of Jane’s Avatar; that is, Joe’s first-order Avatar would be articulated to Jane’s first-order Avatar. There would therefore be two degrees of separation between Joe and the Avatar known as Miss Jane Doe. This would be a second-order Avatar for him, which he could only use via his own first-order Avatar, Mr Joe Smith.

While the internal rules of Matrices vary, the ontological separation between Player and Avatar means that there is often a way to transfer control of an Avatar to another Player. For an online platform such as a social media website, this could be accomplished by one Player handing over their username and password to another, and consequently no longer having an Avatar by which to access the Matrix.

It is possible for Players to have no Avatar within a legal Matrix, and so be considered ‘non-persons’, ‘undocumented aliens’ or ‘stateless persons’, as with many refugees, or to an extent, the British girl born in Spain whose birth was never registered, and who was consequently unable to obtain a passport (Levy & Chapman, 2011). Analogously, being permitted to use a social media account or an account for a virtual online environment is not an inherent right that a legal person has, but rather a privilege granted by the operator of the system. A corporation operating such a system could refuse or rescind the user rights to such an account. The same is true of the use of an Avatar within a legal Matrix. A US Supreme Court case considered this point, noting that:

*To be a citizen of the United States is a political privilege which no one not born to can assume without its consent in some form. The Indians in Oregon, not being born subject to the jurisdiction of the United States, were not born citizens thereof, and I am not aware of any law or treaty by which any of them have been made so since. (Elk v. Wilkins, 1884 at 109)*

In our proposed lexicon, the Indian polity is a separate legal Matrix to that of the United States, and as this had not been articulated as one and the same as the US legal Matrix, Avatars of the Indian legal Matrix were not considered to be Avatars of the US legal Matrix. Stein and Bauer (1996, p. 129) note that a visiting non-US legal person within the United States does not change their status merely by their presence in the United States, but retains their existing nationality. That is to say, an Avatar nested in a legal Matrix remains part of that Matrix even if the Player is geographically in another location. While it is possible to transfer an Avatar permanently to another legal Matrix, this requires that the Avatar disconnect from their existing Matrix in order to do so, or in legal terms, that they effect a ‘complete surrender to jurisdiction’ (Stein & Bauer, 1996). This has parallels with the archaic ‘civil death’ of monks on joining a religious order (McLennan, 2011, p. 195); they were seen as having ‘left the temporal world for the spiritual by entering a monastery’, with any will that they may have made taking effect as if they had died (Black’s Law Dictionary, 2014, p. 484). This issue of which Matrix an Avatar is based in is pertinent to our next section, where we apply our analytical framework to a case study of a multinational corporate structure.
4. Case Studies

4.1. Apple’s Avatars

Much attention has been paid in recent years to the way in which Apple Inc. structures its activities outside the United States (Clelland, 2011; Linden, Dedrick, & Kraemer, 2011), particularly in relation to the corporate structure of its Irish subsidiaries, which has been the subject of investigation by both the European Commission (2016) and the United States Senate’s Permanent Subcommittee on Investigations (2013). The latter considered the purported status of these subsidiaries, to see whether they were merely instrumentalities of the parent company and should be treated as such. The relevant entities are identified in Fig. 2.

*Adapted from Permanent Subcommittee on Investigations (2013, p. 192)*

*Fig. 2.* Part of Apple Inc.’s Group Structure, Depicted Using Our Analytical Frame.
As Apple Inc. is incorporated in the United States, according to that country’s taxation model it should pay tax there, including tax on dividend, interest and royalty payments between controlled non-US subsidiaries (Permanent Subcommittee on Investigations, 2013, p. 6). However, the 1996 introduction of the ‘check-the-box’ accounting classification by the IRS gave rise to the category of a ‘disregarded entity’ whereby for taxation purposes a corporation could elect to treat itself and its subsidiaries as if they were all a single corporation (Hayes, 1997, p. 1160). Together with a 2006 change to tax laws on offshore income, this meant that by declaring its Irish subsidiaries to be ‘disregarded entities’ on tax forms, Apple Inc. was not required to pay taxes in the United States on offshore transfers to its Irish subsidiaries. Meanwhile, under Irish tax law companies are only considered to be resident in Ireland if they are controlled and managed there, but the companies in question were controlled and managed from the United States (Permanent Subcommittee on Investigations, 2013, p. 3). Although the companies were legally registered in Ireland, because the head offices of both Apple Operations Europe and Apple Sales International were said to be outside of Ireland, and as most profits were allocated to these offices, the overwhelming share of their activities were said not to be taxable in Ireland (European Commission, 2016). Similarly, Apple Operations International was not taxable in either the United States or Ireland (Permanent Subcommittee on Investigations, 2013, p. 3), so that using this structure, Apple was able to avoid paying tax on a sum in excess of $100 billion (Permanent Subcommittee on Investigations, 2013, p. 2).

On the one hand, Apple Inc. represented the three Irish companies as being in a separate jurisdiction from Apple Inc., so that their profits were not subject to US corporation tax. On the other hand, in Ireland they represented them as not being controlled and managed in Ireland, and so not subject to corporation tax there. Finally, transfers from subsidiaries in other jurisdictions (such as Apple Retail UK Limited) to the three Irish companies could have been taxable, but for these purposes the subsidiaries were treated as ‘disregarded entities’, as if they were all part of one corporation – the subsidiaries are consolidated into the parent and disappear. Since a transfer within a single corporation is not a taxable event, tax liability for these transfers was also avoided.

To use our terminology, we would say that for corporation tax purposes, in the US tax Matrix, the initial actor, Apple, declared itself to be in the US legal Matrix and its three Irish Avatars (AOI, AOE and ASI) as being in the Irish legal Matrix. Meanwhile, in the Irish tax Matrix, Apple declared the same Avatars as being in the US legal Matrix. Concerning tax on dividend, interest and royalty payments, Apple declared that it had no Avatars and so owed no tax.

While Apple Inc. exists as an Avatar within the United States legal Matrix, the last 10 years have seen the development of a different kind of Matrix within which economic activity can occur, where rather than identifiable persons acting within political states, pseudonymous digital identities transact freely online. This is the realm of Bitcoin, to which we will now turn.
4.2. Bitcoin

Bitcoin is a digital currency that exists as entries in a ‘distributed ledger’ administered by a network of computers whereby each node keeps a copy of all transactions. There is no central administrator such as a central bank in traditional finance. Rather, cryptography is used to secure access to funds and the consensus of the network ensures that the record of transactions cannot be altered by bad actors. The functions of this network are based upon an algorithm that sets the protocols and parameters by which what we might call the Bitcoin Matrix operates (Nakamoto, 2008), much like the role of the source code for an online game, or the document(s) comprising a country’s constitution. That is, the algorithm expresses the intentionality behind the Matrix and effectively constitutes its characteristics and those of the Avatars within it; the algorithm outlines the ‘rules of the game’.

As with the Matrices already discussed, for a Player to interact with the Bitcoin Matrix, they must first articulate an Avatar, known as an ‘address’ (see Ly, 2014 for a description of the Bitcoin ecosystem). This Avatar provides an interface through which the Player acts within the Matrix. As with other Matrices, the Player remains outside of it and their actions, taken by proxy, are seen to be those of their Avatar. It differs, however, in other respects. For instance, where a Player pays for an online game, this action takes place between Avatars within the legal Matrix, in so far as each Avatar in the game is linked to an Avatar in the legal Matrix, while the company that created the game is also a legal Avatar.

There is no company or Natural Person with administrative control over the Bitcoin Matrix; the currency is not held in a bank account, and unlike most shares, there is not an ownership register that identifies legal persons as the owners (Ly, 2014). When a Bitcoin payment is made, the transaction takes place within the Bitcoin Matrix, between the addresses that serve as Avatars. It is by these addresses that a Player is known in the Bitcoin Matrix; not by the name of their legal Avatar. Indeed, No Avatars within a legal Matrix need to be used; Bitcoin Avatars are, by default, separate from other identities so that Players enjoy a degree of anonymity in using them. This is true even for the creator(s) of Bitcoin, who wrote under the pseudonym ‘Satoshi Nakamoto’. His/her/their legal Avatar’s identity remains unknown, although some of the Bitcoin addresses they utilised can be identified. In this sense, Bitcoin addresses can be seen as new first-order Avatars, as, like a Natural Person in the legal Matrix, they are only one degree separated from the Player, without other identities in between.

Notably, Bitcoin Avatars can be created at the press of a button. Indeed, while in legal Matrices transactions will typically occur repeatedly through a fixed and limited numbers of Avatars, in principle a new Bitcoin Avatar could be created for each transaction (see Fig. 3).

We see some commonalities between Bitcoin and the international structuring of multinational corporations, as illustrated in the Apple example above. Both utilise multiple Avatars, and in so doing can potentially avoid taxation of transactions. A significant difference between the two examples is that Apple’s corporate structure
Fig. 3. Avatars in the Bitcoin Matrix.

falls within legal Matrices, while Bitcoin Avatars are largely outside of legal Matrices; a point considered further below. More significant, perhaps, are the relative costs involved in each, with Apple’s corporate structure involving considerable setup and maintenance costs, including those associated with recruiting legal and taxation services. The barriers to accessing the Bitcoin Matrix are much lower than those involved in setting up a multinational corporate structure, requiring only a computer, phone or other suitable electronic device. One key point, however, is that for those already acting within this Matrix, the articulation of a new Avatar is a costless and practically instantaneous action. In contrast, even in jurisdictions with relatively streamlined corporate registration such as the UK, setting up a new Avatar within the legal Matrix is not without cost or processing time. Critically, the property which most separates the two examples is that new Avatars within a legal Matrix are explicitly linked to pre-existing Avatars, while those within the Bitcoin Matrix, broadly, are not. That is, a pre-existing Avatar is required to articulate a new one within the legal Matrix. A Natural Person is required to register a new company, and even the registration of a Natural Person requires another Natural Person to complete the forms. Within the Bitcoin Matrix, each Avatar is explicitly independent of each other.

Where a dispute arises and Players seek to arbitrate, there is a difficulty in that the Bitcoin Matrix has, up to now, been largely outside the control of any particular legal Matrix, as it does not exist in one place or under the control of one person. While a judge might be able to order a bank to freeze or return funds, it cannot directly do the same with Bitcoin currency, as there is no legal person to whom such an order might be given. However, a legal Matrix has control over the Avatars based within it, and as such it can be possible to arbitrate; not by seeking to compel action by the Bitcoin Matrix (currently a legal impossibility), but to compel action by those legal persons, who themselves are articulated as controlling their own Avatars of the Bitcoin Matrix. Hence, while the United States considers Bitcoin transactions taxable (IRS, 2014), the distinction is that
it is the actions of the Avatars within the legal Matrix that are subject to taxation, rather than the Bitcoin Matrix itself.

So, while a Bitcoin address can be used directly by a Player as a first-order Avatar, there is another way that they can be used. A Bitcoin Avatar can also be articulated with a legal Avatar. This was illustrated by the receivership of the corporation formerly operating the US-based cryptocurrency trading platform Cryptsy.com (Riley, 2016), as it was alleged that account holders’ funds were illegally taken by the operators. Since the Bitcoin Matrix does not have an arbitration function, the users raised a dispute within the US legal Matrix.

Though transactions between Bitcoin keys per se are not subject to the control of the US legal Matrix, transactions between US legal persons are. Therefore, once a Player articulated a US legal Avatar with their Bitcoin Avatar, it became a dispute between a US legal person and another US legal person. Consequently, the US legal Matrix had control over those Bitcoin transactions, because it had control over the Avatars involved. Apart from Bitcoin, other cryptocurrencies were at stake in the Cryptsy case, and the same dynamics are pertinent where similar technology is used. This includes one practice which gained much traction during 2017 and 2018, namely that of launching Initial Coin Offerings (ICOs).

ICOs are a fundraising mechanism whereby a quantity of cryptocurrency is issued in a practice similar to initial public offerings of stock, and often undertaken by an incorporated company (Zetzsche, Buckley, Arner, & Föhr, 2017). This presents a considerable counterpoint to the properties of Bitcoin described above. We have described Bitcoin Avatars as being, by default, independent of legal Matrices. The opposite is broadly true with ICOs. Where companies act as issuers in ICOs, that company is an Avatar within a legal Matrix that can be compelled to act by the order of a court. This is particularly problematic, given that the Chairman of the US Securities and Exchange Commission, Jay Clayton, has identified the ICO mechanism as an unlicensed, unregulated securities offering. Consequently, US-based companies that have raised funds in this manner face potential prosecution (Senate Committee on Banking, Housing and Urban Affairs, 2018).

The above considers the use of Avatars within cryptocurrency Matrices by a Player, both directly (without a legal Avatar) and indirectly (via a legal Avatar). However, Bayern (2014, p. 1492) notes another possibility: that computer software can operate a Bitcoin Avatar directly, transmitting value ‘without interacting with the existing financial system – and perhaps, as it turns out, without even interacting with humans’. That is, the only identity directly involved in the operation of such an autonomous system would be a Bitcoin Avatar. Furthermore, Bayern suggests a curious, if anomalous possibility: that such an autonomous system could even hold legal personhood. This would be via a Limited Liability Company (LLC), which in normal practice has ‘members’ that are either Natural Persons or other companies. He describes a legislative oversight whereby, in New York ‘it appears remarkably straightforward to set up a perpetual LLC that has no members in its final, planned operational state’ (Bayern, 2014, p. 1497). With such a corporation operated by an artificial intelligence, via a Bitcoin Avatar, he foresees the potential for the realisation of the ‘self-owning company’ envisioned by Wolff (1938, pp. 505–506), Conard (1976, p. 160) and Dan-Cohen (1986, pp. 46–49).
A scenario like this would not confer all of the attributes of legal personhood and would render such an autonomous system ‘merely the “instrumentality” of a legal person under existing law’ (Bayern, 2015, p. 112). However, in practice this would come very close to being an Avatar without a Player; an entirely new phenomenon that would be disruptive to existing concepts of personhood and identity. Häusermann (2016) does not see the same potential under current Swiss law, but suggests that while this is uncharted legal territory, the likelihood is that as the sophistication of such systems improves there will be demand for autonomous corporations. These autonomous corporations could potentially replace some human managers and boards of directors, albeit not at the governance level of determining a corporation’s purpose.

With the growth in the potential for blockchain-executed contracts there is now the prospect of Bitcoin-like technology being used to manage corporate governance, finance, accounting and payroll functions (Mizrahi, 2017), so that autonomous organisations may be moving closer to a reality. This will call for a new understanding of legal persons and identity dynamics generally that is capable of distinguishing between human and non-human actors, and modelling the relations between them.

5. Conclusion

It has long been recognised that, within the legal domain, corporations have a quasi-human identity (Bakan, 2004; Coleman, 1982). However, this identity has always been understood to be very different from human identity, for, as Baron Thurlow (1731–1806) memorably quipped, the corporation ‘has no soul to be damned, and no body to be kicked’ (quoted in Coffee, 1981, p. 386). In this chapter, we have taken a somewhat different tack, highlighting the similar processes through which actorial identity, whether of humans or of corporations, is constructed. That tack has focused on the concept of the legal person, and how its actorial identity is constituted within a Matrix as an Avatar. Here, it is worth noting that the word ‘person’ derives from the mask worn by actors in ancient Greek and Roman theatre. Adopted into legal practice, the word persona originally referenced artificial beings, and a man’s rank or status; not the man himself, but ‘the state of the man [sic.], the part he plays in society, abstractly, without considering the individual.’ (Andrews, 1910, pp. 157, 159–160).

We have argued that where an ordered system, constituted with its own internal logic, is accessible only through the use of an acquired actorial identity, that there is an ontological separation between that ‘Avatar’ and the living person or ‘Player’ that animates it. We observe that full legal personhood has such characteristics, and that it is not a universal attribute of human beings, but rather is created via the recording of entries in registers. We have proposed an analytical framework for modelling and analysing the core dynamics of such systems and demonstrated the application of this framework with reference to Apple Inc.’s group corporate structure, as well as to cryptocurrencies.

The framework is not intended as a replacement for legal terminology in academic debate or practice, nor to be used in describing the kinds of minutiae to which legal language is best suited. Neither have we ventured
into the extensive debate, not least in institutional theory, as to what is and is not considered legitimate (Suddaby et al., 2017), beyond recognising that – as a games perspective makes clear – legitimacy is always context dependent. Our point is that the dynamics by which identities are created and animated in legal Matrices can be rendered partially invisible by the normal practice of conflating Players and Avatars. The contribution of this chapter is to provide a framework that renders visible many of these distinctions and provides a means of describing them, enabling a degree of comparability between systems on the plane of relations between identities and the strata within which they exist. The model provides a novel understanding of how actorial identity is created and maintained, and the crucial role played by legal practice. In particular, the chapter highlights the separation between a living being and Natural Person; between a ‘Player’ and their legal ‘Avatar’, which is a distinction not usually made in the literature. We see this as providing a new perspective that opens up a vein of analysis not yet explored by institutional scholars.

References


