PROPERTY INTERESTS IN DIGITAL ASSETS: THE RISE OF DIGITAL FEUDALISM

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The emergence of digital assets has created a host of new legal questions regarding their status as a property interest. Digital assets consist of intangible interests like e-mail accounts, social media accounts, reward points, and electronic media. These assets seem like a property interest, but because digital assets are a creature of contract, private contracts determine whether an owner can use, sell, transfer, exclude, donate, or dispose of the asset in a testamentary instrument. These digital asset contracts often take an unprecedented step of prohibiting or severely limiting the transfer of digital assets after death. By unilaterally eviscerating a long cherished right of property—the right to devise—these contracts create digital assets that are more akin to a license or tenancy instead of a fee simple absolute. Contractual terms controlling digital assets create a system this Article calls "digital feudalism," characterized by absolutism, hierarchy, and a concentration of power. This Article examines property interests imbued in digital assets, namely the rights to use, control, exclude, and transfer. It analyzes digital assets under the labor, utilitarian, and personhood theories to justify their existence as a form of property. As a form of property, this Article argues that property law protects an individual's rights to her digital assets—rights like testamentary disposition that cannot be contracted away. Property law has always mirrored society's decisions about how to control and allocate resources and our treatment of digital assets are no different. Digital assets themselves function so similarly to property that we must apply traditional property law principles to ensure that our rights over digital assets do not regress into an anti-democratic and archaic form of feudalism in a technologically driven future.

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Introduction

The digital revolution continues to have a profound influence on our economy, society, and culture. Every day we create documents, emails, texts, and social media posts stored online or on our computers, tablets, and phones. We earn rewards or points based on our loyalty to a company. Assets that were traditionally physical and tangible, like books, movies, and music, are being transformed into digital counterparts. New assets are being created with new social media platforms, reward programs, and cloud computing. These assets are known as "digital assets," but their legal classification as a property interest is still questionable. On one hand, digital assets are created and controlled by private contracts and thus are not a form of property but rather a creature of contract that can be molded and shaped according to the needs and policies of the companies that created the asset. On the other hand, these assets are some form of "thing" that are imbued with property-like characteristics and raise expectations of property protection from the tyranny of one-sided contracts.

The status of digital assets as a property interest is a compelling question that academics, courts, and legislatures have just begun to address. The question comes up in a variety of ways, including such questions as whether digital assets can be regulated by the International Trade Commission as a "good," how traditional copyright laws should be applied to digital assets,² what tax consequences will follow the transfer or donation of digital assets,³ whether the Uniform Commercial Code regulates digital assets,⁴ and whether the right to devise digital

¹ ClearCorrect Operating, L.L.C. v. Int'l Trade Comm'n, 810 F.3d 1283 (Fed. Cir. 2015).

² Vernor v. Autodesk, Inc., 621 F.3d 1102, 1111 (9th Cir. 2010) (first sale doctrine does not apply to licensed software); Capitol Records, L.L.C. v. ReDigi Inc., 934 F. Supp. 2d 640, 648 (S.D.N.Y. 2013) ("The novel question presented... is whether a digital music file... may be resold by its owner through ReDigi under the first sale doctrine. The Court determines that it cannot.").

³ Victoria Blachly, *Uniform Fiduciary Access to Digital Assets Act: What UFADAA Know*, 29 PROB. & PROP., July-Aug. 2015, at 8, 10 ("Often, these assets have economic value and should be included in the estate for tax purposes.").

⁴ Sarah Howard Jenkins, Application of the U.C.C. to Nonpayment Virtual Assets or Digital Art, 11 Duq. Bus. L.J. 245 (2009).

assets at death exists.⁵ For purposes of this Article, I focus on the property interest in digital assets to control what happens to one's digital assets and accounts at death. The ultimate fate of an individual's digital assets is unknown, but an alarming trend in digital asset contracts is to terminate digital asset accounts at death and prohibit the transfer of assets in the account to an individual's estate.⁶ This Article focuses on the troubling implications of contracts limiting the right to devise digital assets, and it argues that users of digital assets, in light of our theories and methodologies used to define property, have property interests that allow a user to determine how an account should be treated upon his or her death. For purposes of this Article, I divide digital assets into three categories: (1) e-mail and social media accounts;⁷ (2) reward points earned by participating in some retail

⁵ Natalie M. Banta, Inherit the Cloud: The Role of Private Contracts in Distributing or Deleting Digital Assets at Death, 83 FORDHAM L. REV. 799 (2014); David Horton, Contractual Indescendibility, 66 HASTINGS L.J. 1047 (2015).

⁶ See Microsoft Services Agreement, MICROSOFT (July 15, 2016), http://windows .microsoft.com/en-us/windows-live/microsoft-services-agreement [hereinafter Services Agreement] ("We may assign these Terms, in whole or in part, at any time without notice to you. You may not assign your rights or obligations under these Terms or transfer any rights to use the Services."); MileagePlus Rules, UNITED AIRLINES, http://www.united.com// web/en-US/content/mileageplus/rules/default.aspx (last visited Feb. 25, 2016) [hereinafter MileagePlus Rules, UNITED AIRLINES] ("Accrued mileage and certificates do not constitute property of the member and are not transferable other than as authorized and/or sponsored by United."); SkyMiles Membership Guide, DELTA 29, http://www.delta.com/content/dam/deltawww/pdfs/skymiles/SM_MemGuide.pdf (last updated Sept. 15, 2014) [hereinafter Delta Skymiles Membership Guide] ("Miles are not the property of any member. Except as specifically authorized in the Membership Guide and Program Rules or otherwise in writing by an officer of Delta, miles may not be sold, attached, seized, levied upon, pledged, or transferred under any circumstances, including, without limitation, by operation of law, upon death, or in connection with any domestic relations dispute and/or legal proceeding."); Statement of Rights and Responsibilities, FACEBOOK, https://www.facebook.com/legal/terms (last updated Jan. 30, 2015) [hereinafter Facebook Terms of Service] ("You will not transfer your account (including any Page or application you administer) to anyone without first getting our written permission."); Twitter Terms of Service, TWITTER, https://g.twimg.com/policies/TheTwitterUserAgreement_ 1.pdf (last visited Feb. 25, 2016) [hereinafter Twitter Terms of Service] ("Twitter gives you a personal, worldwide, royalty-free, non-assignable and non-exclusive license to use the software that is provided to you by Twitter as part of the Services."); Yahoo Terms of Service, YAHOO!, http://info.yahoo.com/legal/us/yahoo/utos/en-us (last updated Mar. 16, 2012) [hereinafter Yahoo Terms of Service] ("No Right of Survivorship and Non-Transferability. You agree that your Yahoo account is non-transferable and any rights to your Yahoo ID or contents within your account terminate upon your death. Upon receipt of a copy of a death certificate, your account may be terminated and all contents therein permanently deleted.").

⁷ Laura Rosenfeld, What's the Most Popular Email Service in the World?, TECH TIMES (Sept. 17, 2014, 1:15 PM), http://www.techtimes.com/articles/15802/20140917/most-popular-email-service-in-the-world.htm (listing Gmail, Yahoo Mail, Outlook, and AOL Mail as the most popular e-mail providers); Faiza Sareah, Interesting Statistics for the Top 10 Social Media Sites, SMALL BUS. TRENDS (July 26, 2015), http://smallbiztrends.com/2015/07/social-media-sites-statistics.html (listing Facebook, Twitter, LinkedIn, Google+, YouTube, Pinterest, Instagram, Tumblr, Flickr, and Reddit).

program or using a certain credit card;8 and (3) electronic media in digital form such as music, videos, and books.9 Each kind of digital asset has different considerations in establishing what kind of property interests attach to it, but all three kinds of digital assets have some claim to ownership sufficient to support a right to devise. One can only imagine what other new forms of digital assets will be created in the future, and our legal system needs a way to characterize and handle individual property interests in these assets in order to prevent digital property from being owned and controlled solely by digital asset companies.

In considering the property interests inherent in digital assets it is important to acknowledge that property interests are not static. They change and morph into a reflection of the kind of society in which we live. The determination of whether property interests exist in digital assets will demonstrate our values, views, and preferences as we move into a digital future. It is essential that we carefully consider the kinds of interests created in the digital frontier. How we treat digital assets should be a conscious choice made by state legislatures to reflect society's economic, political, and social values and not solely made by private contracts.

Part I examines the assumptions underlying contractual language in contracts that create and control digital assets. It analyzes individual incidents of ownership a user has in her digital assets, namely the right to exclude, possess, use, and transfer. It argues that digital assets are imbued with enough property interests such that members of society are reasonable to expect that they should have the right to devise those assets upon their death. Lastly, it argues that contractual terms should not override a right to devise.

Part II turns to three prominent theories of property law—labor, utilitarian, and personhood—to justify the existence of property interests in digital assets. Although the theories do not apply with equal weight to the three categories of digital assets, they do provide additional support for some sort of property interests in digital assets. Property theories support a claim to devise digital assets at death. Part II

⁸ See, e.g., Best Airline Rewards Programs, U.S. NEWS & WORLD REP., http://travel.usnews.com/Rankings/Travel-Rewards/airline-rewards (last visited Sept. 18, 2016); Best Hotel Rewards Programs, U.S. NEWS & WORLD REP., http://travel.usnews.com/Rankings/Travel-Rewards/hotel-rewards (last visited Sept. 18, 2016); CVS to Target: 21 Best Loyalty Rewards Programs, LAS VEGAS REV. J. (May 25, 2015, 12:33 PM), http://www.reviewjournal.com/business/money/cvs-target-21-best-loyalty-rewards-programs.

⁹ Major resellers of digital media include companies like Amazon, Apple, Google, eMusic, eBooks, and Barnes & Noble.

argues that courts and legislatures should consider digital assets as devisable property at an account holder's death.

Part III analyzes the implications of the contractual bar on inheritance of digital assets and the question of ownership in the digital age. It demonstrates that digital asset contracts are changing the nature of our property system and reverting to a feudalistic system where the powerful few create the terms of use of an asset for the many. It argues that digital feudalism is anti-democratic and detrimental to our property system and our system of succession.

The Article concludes that we should not allow the freedom of contract to diminish the protections of property in the digital era.

I. CONTRACTS AND PROPERTY

On the first day of property law class, students learn that property is not defined by the things that we own. 10 Rather, property is defined as a bundle of rights in things around us. 11 Property involves "a specification of standard incidents of ownership," 12 and these incidents of ownership are usually defined as the right to use, transfer, exclude, control, devise, or destroy. 13 These incidents of ownership in digital assets are determined by the terms of contract as well as the expectations and actual use that society imposes on digital assets. As such, two competing and equally important legal doctrines clash: the freedom of contract and the rights of property. Digital assets are another example of where property and contract doctrines conflict, but these legal doctrines have always hovered on the edge of working in tandem or against each other. 14 This Part begins by analyzing assumptions contracts make concerning property interests in digital assets, arguing that contracts

¹⁰ LAURA S. UNDERKUFFLER, THE IDEA OF PROPERTY: ITS MEANING AND POWER 11 (2003) ("The idea that property is 'things' is, however, easily discredited by lawyers and philosophers for its awkwardness and incompleteness." (footnote omitted)).

¹¹ Kevin Gray & Susan Francis Gray, *The Idea of Property in Land*, *in* LAND LAW: THEMES AND PERSPECTIVES 15, 15 (Susan Bright & John Dewar eds., 1998) ("The term 'property' is simply an abbreviated reference to a quantum of socially permissible power exercised in respect of a socially valued resource.").

¹² STEPHEN R. MUNZER, A THEORY OF PROPERTY 23 (1990).

¹³ UNDERKUFFLER, supra note 10, at 13–14.

¹⁴ Regulation in the modern state is very much a limit on the power of contracts. For example, disclosure laws protect consumers from entering into unfair agreements. See ALA. CODE § 8-25-2 (2002); UTAH CODE ANN. § 15-8-5 (West 2010). Anti-discrimination laws limit the freedom of contract in landlord-tenant relationships by forbidding a landlord from discriminating against potential tenants. See, e.g., MASS. GEN. LAWS ANN. ch. 151B, § 4(6)–(8), (11) (West 2013); N.J. STAT. ANN. § 10:5-12(g)–(h) (West 2013). Consumer protection laws forbid misrepresentation or deceit in contracts and prevent consumers from being misled. See, e.g., COLO. REV. STAT. § 6-1-105 (2016); KAN. STAT. ANN. § 50-626 (West 2008).

assume property rights in digital assets exist and that contract is limiting those property interests. It then analyzes incidents of property given to a digital asset holder through contract. It argues that even if contracts disclaim any property rights, contracts create incidents of property in an asset, which require that these assets become a form of property that is, at the very least, devisable. Property interests in digital assets, once given and used, cannot override a right to devise without falling into some form of digital feudalism. The incidents of property encompassed by the use, purchase, or creation of digital assets justify a claim of the right to devise digital assets.

A. Assumptions of Property in Contract

A careful reading of digital asset contracts reveals that the underlying assumption in these contracts is that account holders have property rights in these assets that are being modified by the terms of the contract. These contracts control and dictate terms of property ownership, but they do so under existing property law.

E-mail and social networking platforms consistently protect a user's property interests in the content she creates, uploads, or stores on the platforms. These contracts assume that a property interest exists in the content of an account. Google, for example, specifically states that "[s]ome of our Services allow you to upload, submit, store, send or receive content. You retain ownership of any intellectual property rights that you hold in that content. In short, what belongs to you stays yours." 15 Similarly, Yahoo has users acknowledge that they will "protect the rights, property or personal safety of Yahoo, its users and the public," which assumes that users have some form of property to protect.¹⁶ Yahoo also states that users are "entirely responsible for all Content that [they] upload, post, email, transmit or otherwise make available via the Yahoo Services. Yahoo does not control the Content posted via the Yahoo Services."17 Microsoft explicitly states in its terms of service that "Many of our Services allow you to store or share Your Content or receive material from others. We don't claim ownership of Your Content. Your Content remains Your Content and you are

¹⁵ Google Terms of Service, GOOGLE, http://www.google.com/intl/en/policies/terms (last modified Apr. 14, 2014) [hereinafter Google Terms of Service].

¹⁶ Yahoo Terms of Service, supra note 6.

¹⁷ Id.

responsible for it." E-mail providers' contractual language acknowledges the background law controlling property interests and expressly states that content is owned by the account holder.

Social networking platforms such as Facebook,¹⁹ Twitter,²⁰ LinkedIn,²¹ and Pinterest²² give similar protections to the content and information posted on their sites. By stating that users "retain" ownership and rights over the content they submit, these contracts acknowledge, assume, and uphold the existence of property interests in intangible digital content created, stored, uploaded, or submitted by users.

When it comes to purchased digital assets in the form of music, videos, or books, the contracts change and try to overcome an underlying assumption of property claim in purchased media. Contracts for music, books, and videos go to great pains to state that the purchaser is buying a license to use digital content and not a fee simple interest in the digital content itself.²³ Because the sale is only of a license to access digital content, the contracts expressly forbid the user from selling, leasing, distributing, renting, broadcasting, licensing, transferring, or conveying the interest to a third party.²⁴ These contracts work under an underlying presumption that the sale of digital content would result in a

¹⁸ Microsoft Services Agreement, supra note 6. However, the policy also states that a user "grant[s] to Microsoft a worldwide and royalty-free intellectual property license to use Your Content." *Id.*; see also infra Section I.B.

¹⁹ Facebook Terms of Service, supra note 6 ("You own all of the content and information you post on Facebook, and you can control how it is shared through your privacy and application settings.").

²⁰ Twitter Terms of Service, supra note 6 ("You retain your rights to any Content you submit, post or display on or through the Services.").

²¹ User Agreement, LINKEDIN (Oct. 23, 2014), https://www.linkedin.com/legal/user-agreement [hereinafter LinkedIn User Agreement] ("As between you and others, your account belongs to you.").

²² Terms of Service, PINTEREST, https://about.pinterest.com/en/terms-service (last visited Feb. 25, 2016) ("You retain all rights in, and are solely responsible for, the User Content you post to Pinterest.").

²³ See, e.g., NOOK Store Terms of Service, BARNES & NOBLE, http://www.barnesandnoble.com/h/nook-store-terms-of-service (last visited Feb. 25, 2016) ("We offer you the ability to purchase or download Digital Content.... We grant you a limited, non-exclusive, revocable licence to access and make personal, non-commercial use of the Digital Content."); Terms and Conditions, APPLE (Oct. 21, 2015), http://www.apple.com/legal/internet-services/itunes/us/terms.html [http://web.archive.org/web/20160301161419/http://

www.apple.com/legal/internet-services/itunes/us/terms.html] [hereinafter Apple Terms and Conditions] ("Apple is the provider of the App and Book Services that permit you to license software products and digital content...for end user use only.... The software products made available through the Mac App Store and App Store... are licensed, not sold, to you.").

²⁴ See, e.g., Amazon Music Terms of Use, AMAZON, https://www.amazon.com/gp/help/customer/display.html?nodeId=201380010&pop-up=1 (last updated Nov. 15, 2016) ("[Y]ou may not redistribute, transmit, assign, sell, broadcast, rent, share, lend, modify, adapt, edit, license or otherwise transfer, or use Purchased Music or Subscription Content.").

fee simple ownership interest, but because of the contract, the terms are changed and the sale explicitly results in a license. By creating a license instead of a fee simple property interest, corporations protect the creator's intellectual property rights and ensure that a digital copy will not be easily disseminated without a sale directly from a corporation.

Reward programs have a similar approach to digital media. The contract that creates the reward program assumes that if it stays silent, a reward member could make a property claim in the points or miles earned. Airlines, hotels, and retail companies contractually divest a member of any property claim in the assets. Repeatedly in these contracts is the statement, "[reward points/miles] are not your property."25 Contracts governing reward programs detail specific uses of the rewards earned by a member's repeated purchase of services from a company.²⁶ Although rewards often operate as a new kind of currency, the service provider that created it tightly controls the currency. Knowing that people ascribe a monetary value to their earned miles or points, many companies allow these assets to be donated to a charity of an account holder's choice or gifted to a friend or family member.27 Thus, contractually created assets still operate in a world of assumed property interests and these contracts go to great lengths to ensure that the users opt out of traditional property rules and agree that they have no property interests in their earned assets. Despite contractual language that there is no property interest in these kinds of digital assets, Americans continue to believe their digital assets hold a monetary value: a McAfee survey revealed that the average American valued her digital assets at \$54,722.28

The contractual language of these form contracts should not be controlling. The concept of property and ownership goes beyond the terms of a contract—contracts cannot rewrite an entire system of property for digital assets. Digital asset contracts assume that property rights exist and that absent a prohibition on those property rights, users

²⁵ See Delta SkyMiles Membership Guide supra note 6, at 29 ("Miles are not the property of any member."); Terms and Conditions, AM. EXPRESS MEMBERSHIP REWARDS, https://rewards.americanexpress.com/myca/loyalty/us/catalog/tandc? tier=MR&mrk (last visited Feb. 25, 2016) [hereinafter Terms and Conditions, AM. EXPRESS MEMBERSHIP REWARDS] ("Points are not your property."); Rewards Terms & Conditions, MARRIOTT, http://www.marriott.com/rewards/terms/default.mi#conditions (last updated Apr. 20, 2015) [hereinafter Rewards Terms & Conditions, MARRIOTT] ("Accrued Points and Miles do not constitute property of the Member.").

²⁶ See infra Section I.B.2.

²⁷ See infra Section I.B.2.

²⁸ McAfee Reveals Average Internet User Has More than \$37,000 in Unprotected 'Digital Assets', McAfee (Sept. 27, 2011), http://www.mcafee.com/us/about/news/2011/q3/20110927-01.aspx (including photos, projects, hobbies, personal records, career information, entertainment, and e-mail).

have a claim of ownership. Although contractual language is a factor to consider in determining property rights, contractual terms cannot overcome the importance of the actual incidents of ownership encompassed in digital assets. A careful analysis of the incidents of digital asset ownership reveals a compelling argument that an individual has ownership over digital assets to the extent that she should be able to devise the asset at death.

B. Incidents of Ownership in Contract

As stated above, property has been defined as the legal rights in things, and the extent to which someone has rights in things determines the extent of property interest and ownership in that thing.²⁹ Yet, the incidents of ownership do not directly give rise to property ownership. Causation is a difficult concept when we decide whether, for example, something is devisable and therefore property, or we decide whether something is property and therefore devisable.³⁰ Nevertheless, the incidents of property ownership drive the discussion of what property is. As we will see, the incidents of property ownership are not the only theoretical approach in considering whether something should be property,³¹ but it is a good starting point in analyzing property interests in digital assets.

The incidents of ownership approach is also known as the "bundle of rights" metaphor for property ownership, and is widely used in discussions regarding property rights.³² The Supreme Court has often invoked the bundle of rights approach in examining property interests.³³ These rights can be divided into four broad categories: possession, use,

²⁹ UNDERKUFFLER, *supra* note 10, at 16 ("Property... involves rights, privileges, powers, and immunities that govern the relative power of individuals over tangible and intangible things." (footnote omitted)).

³⁰ Some scholars argue that this is a fruitless endeavor. *See* David Horton, *Indescendibility*, 102 CAL. L. REV. 543, 577 (2014) ("This alienable-thus-property-therefore-descendible chain is deeply flawed. . . . [T]hese issues at the center of the alienability debate have little bearing on the distinct matter of whether claims should be inheritable.").

 $^{^{31}}$ See infra Part II (applying labor, utilitarian, and personhood theories to justify the existence of property).

³² Lior Jacob Strahilevitz, *Information Asymmetries and the Rights to Exclude*, 104 MICH. L. REV. 1835, 1836 (2006) ("The American law generally regards the 'bundle of rights' as property's dominant metaphor.").

³³ Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1031 (1992) (right to "essential use" of land); Hodel v. Irving, 481 U.S. 704, 716 (1987) (right to devise); Keystone Bituminous Coal Ass'n v. DeBenedictis, 480 U.S. 470, 495–97 (1987) (right to economically viable use); Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 435–36 (1982) (right to possess, use, exclude, and dispose); Andrus v. Allard, 444 U.S. 51, 65–66 (1979) (right to possess, exclude, dispose, transport, donate or devise).

alienation, and exclusion.³⁴ These categories include more specific rights like the right to use,³⁵ the right to destroy,³⁶ the right to transfer, the right to devise,³⁷ and the right to exclude.³⁸ Each one of these rights can justify a claim of a property interest, but none of them can do so unilaterally. For example, an individual can possess property and not have a claim of ownership. A bailee or consignee possesses property but must surrender that property when the rightful owner claims it.³⁹ Similarly, a tenant may have the right to exclude others from using a parcel of property or a right to control the property, but may not have the right to sell the property because a tenant has only a leasehold interest. The incidents of property that an individual holds determines what kind of property interest she has—whether it be a leasehold, a bailment, a license, or a fee simple absolute.

The rights that make up the incidents of ownership are not equally significant. For example, the Supreme Court has called the right to exclude the "hallmark of a protected property interest" 40 and "one of the most essential sticks in the bundle of rights that are commonly characterized as property." 41 Legal scholars have also highlighted the

³⁴ D. Benjamin Barros & Anna P. Hemingway, Property Law 1 (2015).

 $^{^{35}}$ John G. Sprankling & Raymond R. Coletta, Property: A Contemporary Approach 69 (3d ed. 2009).

³⁶ Lior Jacob Strahilevitz, *The Right to Destroy*, 114 YALE L.J. 781, 783 (2005) ("As a matter of everyday experience, the right to destroy one's own property seems firmly entrenched.").

^{37 2} JOHN STUART MILL, The Principles of Political Economy with Some of Their Applications to Social Philosophy, in 2 COLLECTED WORKS OF JOHN STUART MILL 223 (J.M. Robson ed., 1965) ("Unlike inheritance ab intestato, bequest is one of the attributes of property: the ownership of a thing cannot be looked upon as complete without the power of bestowing it, at death or during life, at the owner's pleasure: and all the reasons, which recommend that private property should exist, recommend pro tanto this extension of it.").

³⁸ Thomas W. Merrill, *Property and the Right to Exclude*, 77 NEB. L. REV. 730, 730 (1998) ("I shall argue in this Essay that the right to exclude others is more than just 'one of the most essential' constituents of property—it is the sine qua non."); Henry E. Smith, *Property as the Law of Things*, 125 HARV. L. REV. 1691, 1693–94 (2012) ("[P]roperty defines things using an exclusion strategy of 'keep off' or 'don't touch' and then enriches the system of domains of owner control with interfaces using governance strategies.").

³⁹ In re Valley Media, Inc., 279 B.R. 105, 135 (Bankr. D. Del. 2002) ("[M]ere legal or authorized possession, such as in the case of a bailee or consignee, does not grant the requisite authority to make the first sale and will not protect the bailee or subsequent sellers from infringement actions.").

⁴⁰ Coll. Savs. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd., 527 U.S. 666, 673 (1999).

⁴¹ Nollan v. Cal. Coastal Comm'n, 483 U.S. 825, 831 (1987); see also Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 433 (1982) (highlighting the importance of losing the right to exclude in a takings case, "[T]his Court's most recent cases... have emphasized that physical *invasion* cases are special"); Kaiser Aetna v. United States, 444 U.S. 164, 176 (1979).

right to exclude as an essential element of ownership.⁴² The Supreme Court gave the right to devise a similarly protected status as the right to exclude, and explained that the right to devise was a right that has long been part of our American property law system.⁴³ The right to possess lays the groundwork for the common law approach, which posits that possession is the origin of property.⁴⁴

The right to use, however, has not been as protected as the other incidents of ownership.⁴⁵ For example, zoning ordinances and nuisance laws restrict the ability to use real property and have not been found to be a violation of a property owner's fundamental right to use.⁴⁶

The right to transfer property, or the alienability of property, can be accomplished in many ways. Property can be sold, exchanged, gifted, or devised. The common law disfavors restraints on alienation of property.⁴⁷ Yet, the right to transfer can be limited and restricted in a variety of ways depending on the nature of the property and nature of restraint applied.⁴⁸ In many ways, property is defined by its ability to be transferred. For example, a fee simple interest in property means that the property is freely alienable and any limitation on the transfer of a fee simple interest is contrary to the nature of that interest.⁴⁹ A life estate, however, is defined by its termination at death and, therefore, by its nature, cannot be transferred (or devised) after death.⁵⁰ In most cases, restraints on alienation are determined on reasonableness grounds as courts consider the nature of the property and the purpose of the restraint.⁵¹ The right to sell, for example, is less protected, especially if the rights to possess, transport, donate, or devise remain.⁵² Although the

⁴² J.E. PENNER, THE IDEA OF PROPERTY IN LAW 71 (1997); Felix S. Cohen, *Dialogue on Private Property*, 9 RUTGERS L. REV. 357, 374 (1954); Merrill, *supra* note 38, at 740–52.

⁴³ Hodel v. Irving, 481 U.S. 704, 715-16 (1987).

⁴⁴ Richard A. Epstein, Possession as the Root of Title, 13 GA. L. REV. 1221 (1979).

⁴⁵ Andrus v. Allard, 444 U.S. 51, 66 (1979) ("The interest in anticipated gains has traditionally been viewed as less compelling than other property-related interests.").

⁴⁶ Agins v. City of Tiburon, 447 U.S. 255, 262 (1980) (zoning laws do not extinguish a fundamental attribute of ownership), *abrogated by* Lingle v. Chevron U.S.A. Inc., 544 U.S. 528 (2005); *Andrus*, 444 U.S. at 67 (diminishing value does not necessarily rise to the level of appropriation of private property).

⁴⁷ White v. Brown, 559 S.W.2d 938, 941 (Tenn. 1977) ("Her attempted restraint on alienation must be declared void as inconsistent with the incidents and nature of the estate devised and contrary to public policy."); RESTATEMENT (SECOND) OF PROP.: DONATIVE TRANSFERS § 4.1(1) (AM. LAW INST. 1983) ("A disabling restraint imposed in a donative transfer on an interest in property is invalid if the restraint, if effective, would make it impossible for any period of time from the date of the donative transfer to transfer such interest.").

⁴⁸ BARROS & HEMINGWAY, supra note 34, at 161–62.

⁴⁹ *Id.* at 162.

⁵⁰ Id. at 138.

⁵¹ Id. at 161-62.

⁵² Andrus v. Allard, 444 U.S. 51, 65-66 (1979).

right to transfer may be malleable, absolute abrogation of the right, especially when other incidents of property are present, is disfavored under the law.

The right to devise is a unique right in that it is the only incident of ownership that cannot be assigned to another during incapacity unless there is statutory authorization.⁵³ While an individual can give others the right to control, use, possess, transfer, and exclude to a tenant or bailee, under common law, an individual cannot give the right to devise to another unless she has the mental capacity sufficient to execute the will.⁵⁴ Although there are arrangements that allow for others to decide how a testator's property will be devised, namely a power of appointment or a durable power of attorney with express grants of power to modify a trust agreement, the general rule is that an individual must make her own decisions about how to devise her property and plan her estate.⁵⁵ Digital asset terms of service agreements ignore this principle of succession law and divest an account holder of the ability to make decisions about where the contents of an account will go after an account holder's death.

Limited property use, however, does not displace an owner's property interest. The right to exclude others from private property, for example, even though it is a core right of private property, is not absolute. The right to exclude cannot override the necessity of entering property for public purposes (i.e., emergency responders).⁵⁶ In an

⁵³ The Uniform Probate Code, for example, grants a conservator permission to make, amend, or revoke a protected person's will. *See* UNIF. PROBATE CODE § 5-411(a)(7) (UNIF. LAW COMM'N 2010).

⁵⁴ RESTATEMENT (THIRD) OF TRUSTS § 11 cmt. F (AM. LAW INST. 2003) (noting that absent statutory authorization, "courts do not have power to authorize legal representatives to make wills for minors or legally incompetent persons"); RESTATEMENT (THIRD) OF PROP.: WILLS AND OTHER DONATIVE TRANSFERS § 8.1 (AM. LAW INST. 2003) ("A person must have mental capacity in order to make or revoke a donative transfer."); *id.* § 3.1. The Uniform Probate Code allows another to sign the testator's will if it is done "in the testator's conscious presence and by the testator's direction." UNIF. PROBATE CODE §2-502(a)(2) (UNIF. LAW COMM'N 2010).

⁵⁵ See RESTATEMENT (THIRD) OF PROP.: WILLS AND OTHER DONATIVE TRANSFERS § 8.1 cmt. I (AM. LAW INST. 2003). A power of appointment gives the donee of the power of appointment the ability to decide how the property is distributed. But the power of appointment must be clearly devised as such by the original owner. Thus, even with tools like a trust, durable power of attorney, and power of appointment, an individual still must make the original decision to devise on her own. See also In re Estate of Kurrelmeyer, 895 A.2d 207, 212, 214 (Vt. 2006) ("We conclude that the express terms of the power of attorney unambiguously grant the attorney-in-fact the authority to create a trust and to add assets to a trust to accomplish estate planning objectives. . . . The fact that the trust here was created by an agent does not affect its legitimacy.").

⁵⁶ Pearson v. Can. Contracting Co., 349 S.E.2d 106, 110 (Va. 1986) ("Policemen and firemen....do not fit into any of these categories [of trespassers]; they enter premises as of right, under a privilege based on a public purpose.... [C]onsent and invitation are irrelevant to a policeman's or a fireman's privileged entry.").

emergency, public officials may enter an individual's property without fear of liability.⁵⁷ The right to exclude also does not overcome another person's easement to travel on the property to an adjoining property.⁵⁸ The right to devise is also limited in certain situations. For example, devises to pets in a will are invalid.⁵⁹ Directions to destroy property after death are not followed if the destruction would be a senseless waste of resources.⁶⁰ Similarly, the right to use is also limited by nuisance law, zoning regulations, and private agreement in homeowner associations.⁶¹ The characteristic of the bundle of rights theory is that these rights are all encumbered in different ways, yet the owner holds enough of the interests to have a protectable property interest.⁶² Thus, contracts could limit the right to devise to a certain time period or require a processing fee or documentation without completely eviscerating the right.⁶³ Digital asset contracts, however, often simply deny the right to devise outright.

Some may argue that the incidents of property ownership are clearly and solely defined by the terms of contract of the digital assets. Our concept of property, however, extends far beyond labels used in a contract. Of course contractual terms are a starting point in discussing incidents of ownership, but contractual terms are not dispositive. What rights we have over certain objects, how society views and uses digital assets, will be more determinative to whether a property interest exists than a blanket statement in a form contract claiming that such an asset is or is not a property interest. "It is the nature of the interests and the values that they assert... that should determine normative (and

⁵⁷ Id.

⁵⁸ RESTATEMENT (THIRD) OF PROP.: SERVITUDES § 1.2 (AM. LAW INST. 2000) ("An easement creates a nonpossessory right to enter and use land in the possession of another....").

⁵⁹ *In re* Estate of Russell, 444 P.2d 353, 363 (Cal. 1968) ("As a dog cannot be the beneficiary under a will the attempted gift to Roxy Russell is void." (citation omitted)).

⁶⁰ Eyerman v. Mercantile Trust Co., 524 S.W.2d 210, 217 (Mo. Ct. App. 1975) ("A well-ordered society cannot tolerate the waste and destruction of resources when such acts directly affect important interests of other members of that society.").

⁶¹ Vill. of Euclid v. Ambler Realty Co., 272 U.S. 365, 397 (1926) (upholding zoning regulations); RESTATEMENT (SECOND) OF TORTS § 821D (AM. LAW INST. 1979) (defining nuisance as a "nontrespassory invasion of another's interest in the private use and enjoyment of land"); Lee Anne Fennell, *Contracting Communities*, 2004 U. ILL. L. REV. 829, 835–38 (introducing private developments).

⁶² Abraham Bell & Gideon Parchomovsky, A Theory of Property, 90 CORNELL L. REV. 531, 545 (2005) ("In the bundle metaphor, each right, power, privilege, or duty is but one stick in an aggregate bundle that constitutes a property relationship. Whether removing a stick (or set thereof) from the bundle will negate the classification of the remainder as property cannot be determined in advance." (footnotes omitted)).

⁶³ Hodel v. Irving, 481 U.S. 704, 716 (1987) ("Even the United States concedes that total abrogation of the right to pass property is unprecedented and likely unconstitutional.").

presumptive) power."⁶⁴ In order to determine whether a thing is considered property, this Article analyzes (1) the labels used to describe incidents in private contracts, (2) the nature of the way incidents are used, and (3) the expectations society has for incidents of ownership. All three areas play a role in defining property rights in society. The Supreme Court has adopted some form of a reliance interest in determining whether an interest was a property interest protected by the Constitution.⁶⁵ As the Court explained:

Property interests, of course, are not created by the Constitution. Rather they are created and their dimensions are defined by existing rules or understandings that stem from an independent source such as state law—rules or understandings that secure certain benefits and that support claims of entitlement to those benefits.⁶⁶

Thus, the understanding of our digital asset accounts plays a role in forming what entitlements we have to the contents of the account. The terms of service agreements play a role in defining those understandings as well.

By analyzing the terms of the contract, the nature of the digital asset at issue, and the expectations society has regarding that digital asset, we will understand more fully the extent of the property interest users hold in digital assets. This Article examines digital assets independently and categorically. The incidents of ownership are key to determining and defining a property interest, and we will see that the rights an account holder holds in her digital assets are broad and expansive. E-mail, social networking accounts, reward points, and digital media accounts have incidents of ownership sufficient to give rise to the expectation that the contents of the accounts are devisable at death.

1. E-mail and Social Networking

There are, of course, a multitude of e-mail and social networking platforms and each have different terms of service agreements. This Article looks at e-mail and social networking agreements in the aggregate, highlighting specific agreements as they illustrate a wider trend of incidents of ownership in e-mail and social networking

⁶⁴ UNDERKUFFLER, *supra* note 10, at 97 (emphasis omitted).

⁶⁵ Nordlinger v. Hahn, 505 U.S. 1, 13 (1992); Bd. of Regents of State Colls. v. Roth, 408 U.S. 564, 577 (1972); Goldberg v. Kelly, 397 U.S. 254, 261–64 (1970); Joseph William Singer, *The Reliance Interest in Property*, 40 STAN. L. REV. 611, 619 (1988).

⁶⁶ Roth, 408 U.S. at 577.

accounts. E-mail and social networking platforms come and go, but the method of determining the extent of ownership interests in the platform based on the agreements, the nature of the service, and the expectations of society have a much more lasting importance.

a. Right to Exclude

As a general matter, a user has the right to exclude others from using her e-mail or social networking account. The terms of service agreements for many of these platforms specifically require that users not share their sign-on credentials.⁶⁷ E-mail users are especially concerned with their security and right to exclude others from reading or accessing their e-mail.68 The nature of e-mail accounts requires exclusion and privacy in order to fulfill their purpose. E-mail systems developed in order to replace physical exchange of mail. The very name "e-mail" is an abbreviation for electronic mail. As a digital transformation of a physical thing, individuals have certain expectations about their e-mail accounts that derive from experience with physical mail. For example, individuals expect that mail addressed to them is private and that they can exclude others from reading it or accessing it. These expectations have been codified by federal law, which make it a crime to access another individual's e-mail account.69 The Stored Communications Act protects the right to exclude in the digital world.⁷⁰ Users take the right to exclude others from accessing e-mail very seriously, and the right to exclude encourages account users to think that they have some sort of ownership interest over their e-mail accounts.

Social networking is a bit different. Although the terms of service agreements generally provide that users not share their password,⁷¹ and users still desire to exclude others from accessing their accounts, by the nature of the account, it is much more public. Individuals post pictures, videos, or statements on their social networking accounts in order to

⁶⁷ See Facebook Terms of Service, supra note 6 ("You will not share your password...let anyone else access your account, or do anything else that might jeopardize the security of your account."); Google Terms of Service, supra note 15 ("To Protect your Google Account, keep your password confidential.").

⁶⁸ See Daniel E. Harmon, Strengthen Your Passwords: Password Diligence Is an Annoying but Essential Task, LAW. P.C. (Thompson Reuters Westlaw), Aug. 2012, at 1.

⁶⁹ Electronic Communications Privacy Act of 1986, Pub. L. No. 99-508, § 1, 100 Stat. 1848 (1986) (codified as amended in 18 U.S.C. §§ 2701–11 (2012)); Orin S. Kerr, A User's Guide to the Stored Communications Act, and a Legislator's Guide to Amending It, 72 GEO. WASH. L. REV. 1208, 1208, n.1 (2004).

⁷⁰ 18 U.S.C. § 2702(a)(1) (2012) ("[A] person or entity providing an electronic communication service to the public shall not knowingly divulge to any person or entity the contents of a communication while in electronic storage by that service.").

⁷¹ See Facebook Terms of Service, supra note 6 ("You will not share your password").

share the material with others.⁷² A common procedure in employment now is to check the social networking profiles of potential candidates.⁷³ Twitter, for example, is designed to retweet someone else's tweet and thus more widely share and disseminate an idea.⁷⁴ The default for a Twitter user is open access for all posts, which means that no one is excluded from viewing or reusing the tweet.⁷⁵ Other social networking platforms allow individuals to choose who will be excluded from viewing their account and who will be permitted access. YouTube, for example, allows videos to be posted publicly or privately.⁷⁶ Facebook allows individuals to maintain privacy settings and dictate specific people who can or cannot view a certain post.⁷⁷ In general, this right to exclude others permeates the core of social networking and e-mail accounts.

Although the public is often excluded from a private social networking account, some platforms limit users' right to exclude the platform itself. Facebook, for example, grants itself a "non-exclusive, transferable, sub-licensable, royalty-free, worldwide license to use any IP content that [users] post on or in connection with Facebook." These licenses only end when a user deletes the IP content or the account. These license agreements prevent the user from excluding social networking platforms from using or transmitting her posts. In a way,

⁷² See What Is My Profile?, FACEBOOK, https://www.facebook.com/help/133986550032744 (last visited Sept. 8, 2016) ("Your profile is your collection of the photos, stories and experiences that tell your story."); Pages, FACEBOOK, https://www.facebook.com/help/174987089221178 (last visited Dec. 29, 2016) ("Pages are for brands, businesses, organizations and public figures to create a presence on Facebook, whereas profiles represent individual people.").

⁷³ See Ian Byrnside, Note, Six Clicks of Separation: The Legal Ramifications of Employers Using Social Networking Sites to Research Applicants, 10 VAND. J. ENT. & TECH. L. 445 (2008).

⁷⁴ New User FAQs, TWITTER, https://support.twitter.com/articles/215585 (last visited Jan. 11, 2017) ("Twitter is a service for friends, family, and coworkers to communicate and stay connected.... People post Tweets, which may contain photos, videos, links and up to 140 characters of text. These messages are posted to your profile, sent to your followers, and are searchable on Twitter search.").

⁷⁵ About Public and Protected Tweets, TWITTER, https://support.twitter.com/articles/14016 (last visited Feb. 25, 2016) ("When you sign up for Twitter, your Tweets are public by default; anyone can view and interact with your Tweets.").

⁷⁶ Change Video Privacy Settings, YOUTUBE, https://support.google.com/youtube/answer/157177?hl=en (last visited Feb. 25, 2016).

⁷⁷ See, e.g., Privacy Basics, FACEBOOK, https://www.facebook.com/about/basics (last visited Feb. 25, 2016).

⁷⁸ Facebook Terms of Service, supra note 6; LinkedIn User Agreement, supra note 21 (granting itself a "worldwide, transferable and sublicensable right to use, copy, modify, distribute, publish, and process, information and content that you provide through our Services"); Twitter Terms of Service, supra note 6 (granting itself a "worldwide, non-exclusive, royalty-free license (with the right to sublicense)").

⁷⁹ Facebook Terms of Service, supra note 6.

however, the nature of a social network platform requires a user to grant access to the site itself. Considering a physical counterpart, if one posts a picture on her apartment building's notice and bulletin board, the user cannot exclude the building's owner from using the bulletin board in reasonable ways. By posting pictures and information on a social network site, one cannot reasonably exclude the social network site from accessing her posts. Although it may be impossible to exclude the social networking platform from one's account, the right to exclude other members of the public is still very much a part of the social networking model. Thus, both the nature of the accounts and society's expectations favor a strong showing of the right to exclude.

b. Right to Possess

Individual account owners hold the right to possess content in their e-mail and social networking accounts. Terms of service agreements do not mention possession specifically, but the nature of the products and services is such that an individual has and expects to have possession of digital asset accounts. Possession has two elements: a possessor has to have control over a thing and has to have the intent to own a thing.80 E-mail and social networking account holders have possession of their accounts because they have control over the account and they intend to own their accounts. Each account holder has a personally identifying sign-on name and password to ensure her exclusive possession of the account. An e-mail sent to a certain e-mail address or a posting on a person's social networking account will go to the intended recipient who possesses the account. Although possession of a digital asset is not a physical, tangible possession like we see in the case of a photo album or handwritten letter, when one logs on to her account, she has possession of that account.81 Even when one is not logged onto her account, she still has constructive possession of the account because she knows the password. Digital asset passwords are very much like keys that give a user possession of a car even if at that moment the owner of the car is not physically possessing it. Because the password or key gives the holder control and the holder intends to own the account or car, the elements of possession are satisfied.

Like the right of exclusion, it could be argued that the accounts are also in the possession of e-mail or social networking platforms. Like a bank that holds safe deposit boxes for its clients, the contents of a box are owned by the holder of a safe deposit box but perhaps possessed by

⁸⁰ Act of Possession, BLACK'S LAW DICTIONARY (10th ed. 2014).

⁸¹ See, e.g., United States v. Charbonneau, 979 F. Supp. 1177, 1184 (S.D. Ohio 1997) (stating that e-mails are very similar to sending a letter by mail in the context of privacy protections).

the bank.⁸² This is not changed by the fact that a bank has physical possession of the boxes in its building, it merely creates a bailment.⁸³ Similarly, e-mail platforms and social networking platforms may have a claim to possession of the contents of accounts or access to a user's account, but not a claim of ownership. At any rate, account holders have constructive possession of their digital content through their passwords, just as holders of safe deposit boxes have constructive possession through keys. An individual's possession of her e-mail and social networking accounts further supports a claim of ownership.

c. Right to Use

Account holders of e-mail and social networking sites also have the right to use their accounts for the reasons the accounts were designed. The terms of service agreements limit the use of the accounts in some ways. For example, service agreements state that the accounts cannot be used for illegal activity,⁸⁴ that users should use their real names,⁸⁵ that no one should be harmed by a user's use of the service,⁸⁶ that users should not try to access parts of the software or services that are not public,⁸⁷ and that users should not interfere with the use of any other user by flooding their account with spam or sending a virus.⁸⁸ These limits on the use of e-mail and social networking are minimal and do not violate the nature of the service or the expectations that individuals have in using their services.

The nature of e-mail and social networking platforms lends itself to a wide range of uses by account holders. An e-mail account and social networking user can transmit data, personal notes, pictures, videos, status updates, recipes, book reviews, documents, and news. Users can choose to transmit this information to one other person, a group of

⁸² See United States v. New England Merchants Nat'l Bank, 465 F. Supp. 83, 87 (D. Mass. 1979) (bank was in possession of safe deposit box but person leasing the box was owner for tax purposes).

⁸³ Bailment, BLACK'S LAW DICTIONARY (10th ed. 2014).

⁸⁴ Facebook Terms of Service, supra note 6 ("You will not use Facebook to do anything unlawful, misleading, malicious, or discriminatory."); Google Terms of Service, supra note 15 ("You may use our Services only as permitted by law.").

⁸⁵ Facebook Terms of Service, supra note 6 ("Facebook users provide their real names and information").

⁸⁶ *Id.* ("You will not bully, intimidate, or harass any user."); *Google Terms of Service*, *supra* note 15 ("Don't misuse our Services.").

⁸⁷ Google Terms of Service, supra note 15 ("[D]on't interfere with our Services or try to access them using a method other than the interface and the instructions that we provide."); Twitter Terms of Service, supra note 6 ("You may not . . . access, tamper with, or use non-public areas of the Services.").

⁸⁸ Twitter Terms of Service, supra note 6 ("You may not...interfere with... the access of any user...including, without limitation, sending a virus, overloading, flooding, spamming, mail-bombing the Services.").

people, or to a world-wide audience. The nature of these services also allows users to store an immense number of personal documents, pictures, and videos on the platform to access anywhere there is an Internet connection. Users have a right to modify their accounts, change profile pictures or statuses, and resend or repost things they find particularly important. In addition, users have the right to delete the contents of their digital asset accounts at any time as well as terminate and delete their accounts with a certain platform provider.⁸⁹

The nature of e-mail and social networking accounts informs the expectations that users have about their accounts. Users expect to be able to post or e-mail what they want, when they want. They expect to be able to access the contents of their accounts on the platform at any time. Ousers also expect to be able to terminate or delete their accounts at any time. These broad rights of use, based on the terms of agreement, the nature of the assets, and the expectations of the users, point to a credible ownership claim in digital assets.

d. Right to Transfer

The right to transfer illuminates the two kinds of ownership interests an individual may have in an account. A user has an interest in the contents of an account, and a user has an interest in access to an account. In most situations, the contents of an account are freely transferable. The very nature of e-mail and social networking is to make the transfer of documents, pictures, and videos instantaneous and easy. E-mail and social media are digital platforms designed to share and transfer the contents of an account with just a few clicks of a button. While the contents of an e-mail or social media account are designed to be transferred, an individual's access to the account is not designed to be transferred to others. Some companies leave allowances for family members or groups to share accounts instead of having an individual

⁸⁹ Google Terms of Service, supra note 15 ("You can stop using our Services at any time").

⁹⁰ When service goes down for major social networking platforms, it is a newsworthy matter of concern. See Dave Lee, Facebook Down for Second Time in a Week, BBC NEWS (Sept. 28, 2015), http://www.bbc.com/news/world-us-canada-34383655; Twitter Down: Site Experiences Some Downtime for Users Today, HUFFINGTON POST (June 3, 2013, 4:31 PM), http://www.huffingtonpost.com/2013/06/03/twitter-down-site-experie_n_3380400.html.

⁹¹ Google Terms of Service, supra note 15 ("Some of our services allow you to upload, submit, store, send or receive content."); Statement of Rights and Responsibilities, FACEBOOK, https://www.facebook.com/terms (last visited Feb. 25, 2016) ("You own all of the content and information you post on Facebook, and you can control how it is shared through your privacy and application settings."); Twitter Terms of Service, supra note 6 ("Content you submit, post, or display through the Twitter Services is public by default."); Yahoo Terms of Service, supra note 6 ("Yahoo provides users with access to a rich collection of resources, including without limitation various communications tools ").

account.⁹² This allows the group to transfer the access to the account depending on the needs of the group administrators. E-mail and social media companies, however, usually intend that the accounts be used by an individual user.⁹³ Some companies expressly prohibit the transfer of an account to another individual.⁹⁴

Because e-mail and social networking accounts are designed to be used by an individual, people expect not to transfer their accounts to another person while they are alive. Perhaps individuals choose to have shared accounts with spouses or children, but it is unlikely that a living individual would completely divest herself of her individual e-mail or social networking account. The need or desire to transfer an account to others is most likely only upon an account holder's death.

e. Right to Devise

Companies do not have a uniform approach to whether account access or the contents of an account can be devised. Yahoo specifically states that the account and contents to the account are not devisable. Other companies leave the issue of transfer at death more open, perhaps resolving the issue on a case-by-case basis. Google allows account

⁹² Google Terms of Service, supra note 15 ("To protect your Google Account, keep your password confidential."); Share an Account Among Users, GOOGLE, https://support.google.com/a/answer/33330?hl=en (last visited Feb. 25, 2016) ("With the user-managed groups service, you can use groups to create 'shared mailboxes' for your users. With a shared mailbox group, users can send and reply to messages using the group's email address rather than their own addresses.").

⁹³ Share an Account Among Users, supra note 92 ("Each Gmail account is intended and designed for use by an individual user.").

⁹⁴ Can I Create a Joint Facebook Account or Share a Facebook Account with Someone Else?, FACEBOOK, https://www.facebook.com/help/149037205222530 (last visited Feb. 25, 2016) ("We don't allow joint accounts."); Facebook Terms of Service, supra note 6 ("You will not transfer your account... to anyone without first getting our written permission."); Microsoft Services Agreement, supra note 6 ("We may assign these Terms, in whole or in part, at any time without notice to you. You may not assign your rights or obligations under these Terms or transfer any rights to use the Services."); Yahoo Terms of Service, supra note 6 ("You agree that your Yahoo account is non-transferable and any rights to your Yahoo ID or contents within your account terminate upon your death.").

⁹⁵ Yahoo Terms of Service, supra note 6 ("No Right of Survivorship and Non-Transferability. You agree that your Yahoo account is non-transferable and any rights to your Yahoo ID or contents within your account terminate upon your death. Upon receipt of a copy of a death certificate, your account may be terminated and all contents therein permanently deleted." (emphasis added)).

⁹⁶ Sarah Jacobsson Purewal, *How to Prepare for Your Digital Afterlife*, CNET (Mar. 2, 2016, 10:30 AM), https://www.cnet.com/how-to/how-to-prepare-for-your-digital-afterlife ("If you have a Microsoft email account (Hotmail, Live, MSN, or Outlook.com), family members will need to go through Microsoft's Next of Kin process in order to gain access to your account data. Microsoft will release your account data—including emails, attachments, and your address book—to your next of kin on a DVD. Your next of kin will not receive your password or be able to access your account (just the data).").

holders to decide how their accounts will be treated after death, either by naming a person to whom the contents of the account will be sent or requesting that the account be deleted.⁹⁷ Similarly, Facebook allows account holders to designate whether they would like their account memorialized or deleted at their death.⁹⁸ Other platforms, such as Twitter and AOL Mail, are silent about what happens to e-mail and social networking accounts at death.

Account holders have strong arguments that they have enough incidents of ownership in both access to and the content of social networking and e-mail accounts to support a property claim sufficient to allow the transfer at death to an account holder's devisees or beneficiaries. Account holders have the right to exclude, possess, use, and transfer the contents of their social networking and e-mail accounts during their life. Because of an individual's extensive control over her e-mail and social networking accounts, it is reasonable to assume that she has a property interest in the contents of her account sufficient to allow her to dictate what should happen to that property when she dies.

2. Reward Programs

Reward programs range across a number of different industries. Airlines, hotels, credit cards, and retail businesses create reward programs for loyal customers. It is estimated that there are over three billion customer loyalty program memberships in America.⁹⁹ Reward programs allow customers to accumulate some form of points and use these points as a currency to buy other products, services, samples, or, in some cases, exchange them for cash. In many cases, reward points are not devisable at death due to the terms of agreement entered in by the customer and the company. However, like other digital assets, reward program points carry the incidents of property sufficient to uphold a claim of a personal property interest that should be devisable at death.

⁹⁷ Inactive Account Manager, GOOGLE, https://www.google.com/settings/account/inactive (last visited Nov. 10, 2016) ("Add trusted contacts who should be made aware that you are no longer using your account. You can also share data with them if you like.... If you wish, instruct Google to delete your account on your behalf.").

⁹⁸ See Report a Deceased Person, FACEBOOK, https://www.facebook.com/help/408583372511 972 (last visited Feb. 25, 2016).

⁹⁹ U.S. Customer Loyalty Program Memberships Top 3 Billion for First Time, 2015 Colloquy Census Shows, COLLOQUY (Feb. 9, 2015), https://www.colloquy.com/latest-news/2015-colloquy-loyalty-census.

a. Right to Exclude

Reward programs give customers the right to exclude others from accessing or using their acquired points. Like e-mails and social networking, reward programs usually have a customer sign up for the program with a unique username and password. Oftentimes, this username is an individual's e-mail address. Digital assets are often intertwined because access to e-mail accounts also gives access to reward programs. Thus, individuals are excluded from reward programs to the same extent they are excluded from e-mail and social networking accounts. In addition, the nature of reward programs is based on the concept of excluding others from an account. Individuals earn or accrue points that they can use to satisfy their own desires. Once they earn the points, only the company from which they earned the points can take them away. Description of the right to exclude in reward program points. Individuals can access their accounts, view their points, and ensure that no one else has claim to them.

b. Right to Possess

Reward programs also give customers the right to possess the reward points. The accounts are held in customers' individual names and protected by usernames and passwords. 103 The nature of the account or membership in the reward program is that an individual may view her points and add to her possession of those points through loyal patronage. Individuals expect that reward points are in their control and they have intent to possess their reward accounts. 104

The right to possess, however, may be challenged by the terms of an agreement. Companies make it clear that the points are not property. 105 Companies continue to have a significant degree of control over the points and rewards earned and can change their policies at any time. When companies go bankrupt, they can choose whether or not to

¹⁰⁰ See, e.g., Create an Account, DELTA, https://www.delta.com/profile/enrolllanding.action (last visited Feb. 25, 2016); Join Marriott Rewards, MARRIOT, https://www.marriott.com/rewards/createAccount/createAccountPage1.mi?segmentId=elite.nonrewards (last visited Feb. 25, 2016) [hereinafter Join Marriot Rewards].

¹⁰¹ Join Marriott Rewards, supra note 100.

¹⁰² See, e.g., Nw., Inc. v. Ginsberg, 134 S. Ct. 1422, 1426–27 (2014) (airline frequent flyer program terminated petitioner's membership and perks, and Supreme Court held that frequent flyer program was not subject to state law under the Airline Deregulation Act of 1978).

¹⁰³ See supra notes 99-101.

¹⁰⁴ Act of Possession, BLACK'S LAW DICTIONARY (10th ed. 2014).

¹⁰⁵ Delta Skymiles Membership Guide, supra note 6, at 29 ("Miles are not the property of any Member."); Rewards Terms & Conditions, MARRIOT, supra note 25 ("Accrued Points and Miles do not constitute property of the Member."); Terms and Conditions, AM. EXPRESS MEMBERSHIP REWARDS, supra note 25 ("Points are not your property.").

honor rewards that customers have accrued. ¹⁰⁶ Possession is limited. A user only retains possession until a company decides to discontinue the program—and take possession of the intangible rewards. ¹⁰⁷ Credit card companies often discontinue the program and take points out of a customer's possession if a card is canceled for any reason. ¹⁰⁸ Airline and credit card companies also put an expiration on points accrued, thereby limiting the possession rights of the users. ¹⁰⁹ Thus, possession rights are limited by the terms of the contract. These contractual terms are often in conflict with the nature of the points and the expectations of the customers.

c. Right to Use

Customers have a right to use their rewards points in a variety of ways, but the right to use the points is limited by contract. Some companies only allow individuals to use points they accrue for items at that business. ¹¹⁰ Some companies allow points to be used at a variety of businesses, including airlines, hotels, restaurants, and other partner businesses. ¹¹¹ Some companies also allow and encourage customers to donate their points to approved charities. ¹¹²

106 Julie Bosman & Michael J. De La Merced, *Borders Files for Bankruptcy*, N.Y. TIMES: DEALBOOK (Feb. 16, 2011, 11:39 AM), http://dealbook.nytimes.com/2011/02/16/borders-files-for-bankruptcy; Matt Brownell, *Use 'Em or Lose 'Em: Your Rewards Points Aren't Really Yours*, AOL (Aug. 28, 2013, 12:00 PM), http://www.dailyfinance.com/2013/08/28/credit-card-rewards-points-arent-really-yours.

107 Brownell, supra note 106.

108 Joel Grover & Matt Goldberg, Credit Card Rewards Points: Use 'Em Soon, or Lose 'Em?, NBC SAN DIEGO (Apr. 6, 2009, 10:55 AM), http://www.nbcsandiego.com/news/business/Credit-Card-Rewards-Points.html.

109 See, e.g., Michael Finney, Woman Loses 300,000 Reward Points, ABC 7 NEWS (Sept. 1, 2011, 8:35 PM), http://abc7news.com/archive/8339379; AAdvantage FAQs, How Can I Keep My Miles from Expiring, AM. AIRLINES, https://www.aa.com/i18n/customer-service/faqs/aadvantage-faqs.jsp (last visited Nov. 10, 2016) ("Just earn or redeem miles on American or with an AAdvantage partner at least once every 18 months. We'll automatically extend your mileage expiration date 18 months from the date of your most recent activity."); MileagePlus Rules, UNITED AIRLINES, supra note 6 ("Mileage accrued shall only be subject to expiration on the last day of the eighteen (18) months after the last account activity in the member's account.").

110 How to Redeem Toward Disney Rewards, DISNEY, https://disneyrewards.com/how-to-redeem (last visited Feb. 25, 2016) (explaining how to redeem Disney Reward Dollars).

111 Earn & Use Points, HILTON HHONORS, http://hhonors3.hilton.com/en/earn-use-points/overview/index.html (last visited Feb. 25, 2016); Freedom to Redeem, SOUTHWEST, https://www.southwest.com/rapidrewards/how-to-redeem (last visited Feb. 25, 2016); Use Award Miles, UNITED AIRLINES, https://www.united.com/web/en-US/content/mileageplus/awards/default.aspx (last visited Feb. 25, 2016).

112 See Yvette Clark, How to Donate Frequent-Flier Miles, USA TODAY, http://traveltips.usatoday.com/donate-frequent-flier-miles-20716.html; Donate Miles, DELTA, http://www.delta.com/buygftxfer/displayDonateMiles.action (last visited Feb. 25, 2016) (listing approved charity organizations for donations).

The range of uses that rewards programs give their users raises an expectation of an ownership interest in points. Points serve as a form of currency, allowing account holders to use the points they earn in the same way they use cash. A marketing company has estimated that thirty-three percent of forty-eight million dollars earned in rewards points by American consumers each year remain unused, which is valued at about sixteen billion dollars. This form of currency is not as interchangeable as cash, but it is still widely used and exchanged. An average American household has membership in twenty-nine loyalty programs, and is active in twelve of them. As a result, a new form of currency has developed that is tightly controlled by companies that have offered rewards for being a loyal customer.

d. Right to Transfer

Worried that reward point programs would evolve into some kind of indirect second market, companies have limited the right to transfer points. Although companies have sprung up to help users sell points, these kinds of sales violate the terms of agreements of many companies. Some companies, however, do allow rewards points to be shared or transferred in a limited way to another rewards account. United Airlines, for example, allows users to transfer up to twenty-five thousand miles to another individual's account, but assesses a \$7.50 fee per five hundred miles and a thirty-dollar processing fee. Many reward programs allow individuals to gift the redemption of points to another. A customer can use her points to book a flight for another individual. In this way, reward programs allow a limited form of transferring the benefits of the points to another. Although reward programs usually do not allow users to exchange rewards for cash, most airline and hotel reward programs allow customers to "buy" points with

¹¹³ Brian O'Connell, \$16 Billion in Rewards Points Go Unused, MAIN STREET (May 3, 2011, 2:00 PM), https://www.mainstreet.com/article/study-16b-rewards-points-go-unused.

¹¹⁴ See COLLOQUY, supra note 99.

¹¹⁵ Terms and Conditions, AM. AIRLINES, https://www.aa.com/i18n/AAdvantage/termsConditions.jsp (last visited Feb. 25, 2016) ("At no time may AAdvantage mileage credit or award tickets be purchased, sold, advertised for sale or bartered").

 $^{^{116}}$ $Buy\ Personal\ Miles,\ MILEAGEPLUS\ UNITED,\ https://buymiles.mileageplus.com/united/index_en.html (last visited Feb. 25, 2016).$

¹¹⁷ Buy, Gift & Transfer, HILTON HHONORS, http://hhonors3.hilton.com/en/earn-use-points/buy-give-receive/index.html (last visited Feb. 25, 2016) (detailing how an individual can buy points from Hilton directly and give or receive points from another user); Buy Personal Miles, supra note 116; Buy, Share or Donate Points, MARRIOT, https://www.marriott.com/marriott-rewards/use/buy-donate.mi (last visited Feb. 25, 2016).

cash and then use those points for the exchange of services.¹¹⁸ The right to transfer is limited by the terms of service agreement, but is not absolutely prohibited, which gives rise to the expectation that the reward points could be transferable, or rather devisable at death.

e. Right to Devise

Reward program contracts often prohibit the right to devise at death. Often, under the terms of an agreement, a customer's right to transfer ends at death, 119 even though there are expectations that these valuable points could pass to the customer's heirs or beneficiaries. 120 Not every contract has the same terms about devises, and some companies allow points to be devised or are silent about the ability to transfer rewards at death. 121

Whether there is a right to devise rewards points based on incidents of property held by account holders is a close call. On one hand, the terms of the agreement tightly control an account holder's right to possess, use, and transfer the rewards. The rewards can expire if certain conditions are met, the companies clearly state that they have no property rights, and a customer's control over the points is limited due to the terms of agreement that a company can and does change at any time. ¹²² Customers often have no recourse against a change in a company's reward program, even if they should retain a reliance

¹¹⁸ See, e.g., Buy, Share or Donate Points, supra note 117 ("Don't have enough points for a specific reward? Searching for that perfect gift? You can purchase up to 50,000 points per calendar year for yourself or another Marriott Rewards member.").

¹¹⁹ Delta Skymiles Membership Guide, supra note 6, at 29 ("Miles are not the property of any member. Except as specifically authorized in the Membership Guide and Program Rules or otherwise in writing by an officer of Delta, miles may not be sold, attached, seized, levied upon, pledged, or transferred . . . including, without limitation, by operation of law, upon death, or in connection with any domestic relations dispute and/or legal proceeding.").

¹²⁰ Estate planners are beginning to counsel clients on how to transfer assets, including reward programs at death. Gerry W. Beyer & Naomi Cahn, When You Pass On, Don't Leave the Passwords Behind: Planning for Digital Assets, 26 PROB. & PROP., Jan.–Feb. 2012, at 40, 43.

¹²¹ Susan Stellin, *The Afterlife of Your Frequent Flier Miles*, N.Y. TIMES (Nov. 21, 2012), http://travel.nytimes.com/2012/11/25/travel/the-afterlife-of-your-frequent-flier-miles.html?_r= 0 (explaining that JetBlue and United did not have clear policies); *IHG Rewards Club Global Membership Terms and Conditions*, INTERCONTINENTAL HOTELS GRP., http://www.ihg.com/hotels/us/en/global/customer_care/member-tc (last visited Feb. 25, 2016) [hereinafter *InterContinental Hotels Group*] ("When an IHG Rewards Club member passes away, the member's IHG Rewards Club points may be transferred to the IHG Rewards Club account(s) of the member's beneficiary(ies).").

¹²² Before March 2013, Delta allowed the transfer of a deceased SkyMiles member's miles as long as an executor provided an affidavit and a death certificate. Without notice to its members, Delta changed its policy by stating in its SkyMiles Membership Guide that miles could not be transferred upon death. See John Ollila, Delta's Policy Change About Death & SkyMiles, LOYALTYLOBBY (Mar. 21, 2013), http://loyaltylobby.com/2013/03/21/deltas-policy-change-about-death-skymiles.

interest. This would favor the companies' decision not to allow the right to devise.

On the other hand, however, rewards points often function much like another form of physical property—cash. As we saw above, the reward programs allow users to use the points to purchase a wide variety of goods and services. In addition, the reward programs allow users to transfer these points and rewards to others during their lives. This ability to control the transfer of points during life gives customers the expectation of an ownership interest in points that would allow them to transfer the points at death. Because these reward programs often create an asset that functions much like a form of currency, it is reasonable to expect that this currency will be transferable at death because currency is always transferable at death. Although there are reasons why a company's control of reward programs outweighs the control that an individual account holder has in the rewards, because these assets function so much like physical property it is reasonable to expect that they can be transferred at death.

3. Digital Media

The digital revolution has transformed the world of digital media. Whereas ten years ago, the majority of movies, music, and books were purchased in some kind of physical form, today, more and more of these items are being purchased in digital form. These digital files are replacing tangible, physical property, and, if the terms of contracts are determinative, Americans may have lost an ownership interest in them that they had over the physical copy of the media. The incidents of ownership are far more limited in the digital media world for customers who buy them. Yet, the nature of media and expectations of society demonstrate that digital limits of ownership should not eviscerate the right to transfer digital property at death. It is important to note a distinction in forms of digital media. Some digital media can be downloaded onto an individual's device and transferred to an external storage device, which would transform it into physical property akin to a DVD, CD, or book. Other forms of digital media can only be accessed on an individual's device by signing into an account and viewing materials they have purchased through such forums like iTunes or Amazon.¹²³ Once purchased, this digital media cannot easily be transferred to any external storage device. This Article addresses the

¹²³ See, e.g., AMAZON, https://www.amazon.com (last visited Sept. 6, 2016); *iTunes*, APPLE, https://www.itunes.com (last visited Sept. 6, 2016).

latter scenario, digital media that cannot be easily transferred to a physical device, such as a DVD or CD, but that can only be played or accessed from the digital platform.

The terms of service agreements that control digital media are more specific than those controlling e-mail, social networking, and rewards points. Instead of granting a customer an ownership interest in media, companies grant a license. Licenses for software and digital media control a user's use and solve problems of ownership by deeming such purchase a "license" as opposed to a sale. 124 But the label used by an agreement is not determinative. 125 Courts look to the terms of the agreement and consider whether a license actually conveys an ownership interest or not. 126 The Ninth Circuit recently pointed to three considerations in deciding whether a user is a licensee or an owner: (1) the express language of the agreement; (2) whether the agreement "significantly restricts the user's ability to transfer"; and (3) whether the agreement "imposes notable use restrictions." 127 Thus, it is important to consider the incidents of ownership granted to the account holder in digital media in determining what property interests an account holder has in purchased media.

a. Right to Exclude

People buy digital media using accounts in their names (oftentimes with their e-mail addresses) and protected by passwords. These usernames and passwords allow individuals to view their purchases on a number of different devices and access purchased media on an Internet

¹²⁴ See, e.g., Apple Terms and Conditions, supra note 23 ("The software products made available through the Mac App Store and App Store . . . are licensed, not sold, to you."); Help & Customer Service: Kindle Store Terms of Use, AMAZON, http://www.amazon.com/gp/help/customer/display.html?nodeId=201014950 (last visited Feb. 25, 2016) ("[T]he Content Provider grants you a non-exclusive right to view, use, and display such Kindle Content you may not sell, rent, lease, distribute, broadcast, sublicense, or otherwise assign any rights . . . to any third party ").

¹²⁵ See Vernor v. Autodesk, Inc., 621 F.3d 1102, 1108 (9th Cir. 2010) (finding that an agreement labeled as a license is a factor to consider but is not determinative); UMG Recordings, Inc. v. Augusto, 558 F. Supp. 2d 1055, 1060 (C.D. Cal. 2008) ("In determining whether a transaction is a sale or a license, courts must analyze the 'economic realities' of the transaction.'[T]he fact that the agreement labels itself as a license... does not control [the court's] analysis.'" (alteration in original) (citations omitted)). The Augosto court looked to UMG's lack of intent, inability to regain possession, and absence of recurring benefit as evidence of transfer of ownership. The only benefit to UMG in attempting to license content was to control trade in music. *Id.*

¹²⁶ Wall Data, Inc. v. L.A. Cty. Sheriff's Dep't, 447 F.3d 769 (9th Cir. 2006) (holding that the defendants were licensees and not owners of the software and were ineligible to invoke a defense available to "owners"); Triad Sys. Corp. v. Se. Express Co., 64 F.3d 1330 (9th Cir. 1995); MAI Sys. Corp. v. Peak Comput., Inc., 991 F.2d 511 (9th Cir. 1993).

¹²⁷ Vernor, 621 F.3d at 1111.

platform. Like e-mail, social media, and reward program accounts, digital media accounts allow the holder of the account to have control over excluding others from the account. Account holders can give access to their account to others by sharing their usernames and passwords, 128 but they can exclude all others from accessing their accounts by keeping their usernames and passwords confidential (or by changing them once they have given others access).

In addition, creators of digital media retain the copyright in material and are able to exclude an account holder from uses of the material that would infringe on their sole ability to distribute the media.

b. Right to Possess

Account holders of digital media have the right to possess digital media in their accounts. They have control over media and intent to possess it. The purchaser has a right to watch, listen, or read this media at any time. The purchaser intended to possess the media when she bought it from a digital medial platform. Amazon video, 129 Amazon music, 130 Apple, 131 and Barnes & Noble, 132 for example, all note that sales of the digital content are final. A purchaser cannot return the digital content and get a refund of the purchase price. The digital media purchased on these platforms for all intents and purposes are possessed by the purchaser.

The right to possession is not absolute, of course, because the platform also possesses digital files. If the platform has technical difficulties, for example, a user may not be able to access her account

¹²⁸ Help & Customer Service: Authorize Your Device, AMAZON, https://www.amazon.com/gp/help/customer/display.html/ref=help_search_1-1?ie=UTF8&nodeId=201379910&qid=1483135512&sr=1-1 (last visited Feb. 25, 2016) ("You can have up to 10 devices authorized to your account....").

¹²⁹ Help & Customer Service: Amazon Video Terms of Use, AMAZON, http://www.amazon.com/gp/help/customer/display.html?nodeId=201422760 (last updated Dec. 13, 2016) ("The Service may allow you to...purchase Digital Content for viewing over an indefinite period of time....[P]urchase... transactions for Digital Content are final.").

¹³⁰ Help & Customer Service: Amazon Music Terms of Use, AMAZON, http://www.amazon.com/gp/help/customer/display.html/ref=help_search_1-1?ie=UTF8&nodeId= 201380010&qid=1447200455&sr=1-1 (last updated Nov. 15, 2016) ("[A]ll sales are final and risk of loss transfers upon sale. . . . When you purchase Music Content from the Store, you are directing us to store that Purchased Music in the Music Library Service.").

¹³¹ Apple Terms and Conditions, supra note 23 ("All sales and rentals of products are final.").
132 Refund and Return Policies, BARNES & NOBLE, https://help.barnesandnoble.com/app/answers/detail/a_id/15/kw/returning%20nook%20book (last visited Nov. 10, 2016) ("NOOK digital content and other downloaded purchases, including but not limited to downloadable PDFs... are not returnable.").

and possess her digital media. ¹³³ In addition, the platform has the ability to delete digital media and not allow an account holder to access digital files. A situation like this famously occurred in 2009 when Amazon deleted a purchased book off of the Kindles of users who had purchased the book because Amazon discovered it did not have authorization to sell the book. ¹³⁴ Users were reimbursed for the purchase price of the book, but, as this example shows, users did not have absolute possession over the book they purchased digitally from an online platform.

c. Right to Use

Although account holders generally have the right to use and view their digital media at any time after the initial purchase, digital platforms do limit this right to use in some ways. iTunes, for example, only allows account holders to access their software on five devices at a time. 135 Amazon allows ten devices to be authorized to a certain digital media account. 136 The right to use, like the right to possess, is dependent on the proper functioning of the platform. Despite the limitations of the number of devices and availability of the platform, account holders of digital media expect to be able to view their digital media at any time. Much of the success of digital media is based on the fact that it is more convenient and accessible to view and use than the physical counterparts.

d. Right to Transfer

Once an individual buys a physical copy of music, video, or book, a seller cannot restrict transfer of that media under the first sale doctrine protected in the Copyright Act of 1976.¹³⁷ The Supreme Court has held that the Copyright Act means that the holder of a copyright can control the first sale of the media, but none of the sales after.¹³⁸ Thus, a physical copy of media can be transferred once according to the owner's desires. Digital media has a different approach. Using license agreements for audio-visual works has been particularly popular as availability of such

¹³³ Gemma Mullin, Amazon Offers Free Extensions to Prime Members After Service Stops Streaming on Certain TV Models, MIRROR (Jan. 10, 2016, 8:01 PM), http://www.mirror.co.uk/news/technology-science/technology/amazon-offers-free-extensions-prime-7151492.

¹³⁴ Brad Stone, *Amazon Erases Orwell Books from Kindle*, N.Y. TIMES (July 17, 2009), http://www.nytimes.com/2009/07/18/technology/companies/18amazon.html?_r=0.

¹³⁵ Apple Terms and Conditions, supra note 23 ("You shall be authorized to use iTunes Products on five iTunes-authorized devices at any time.").

¹³⁶ Help & Customer Service: Authorize Your Device, supra note 128 ("You can have up to 10 devices authorized to your account").

^{137 17} U.S.C. § 109(a) (2012) ("[T]he owner of a particular copy... is entitled, without the authority of the copyright owner, to sell or otherwise dispose of... that copy....").

¹³⁸ See Bobbs-Merrill Co. v. Straus, 210 U.S. 339, 350-51 (1908).

works in digital format and on the Internet has rapidly increased. When third-party programs began to facilitate file sharing and downloading of unauthorized digital copies, the music, motion picture, and television industry had to act quickly in order to fight online piracy. These companies were successful in claiming that these third-party providers were violating the Copyright Act. 139

License agreements usually prohibit the user from selling or transferring the content they have purchased. Whether it is a software agreement, book, movie, or song, the agreement states that the user has purchased an individual license to use the product or content. Such licenses thwart the first sale doctrine, which allows a user to sell a product to another user without infringing on a creator's copyright. Licenses such as these also potentially thwart descendibility of the content, as the right to the material ends with the user's death.

As discussed above, different platforms have different rules about transferring digital files to another device. Apple, Google, and Amazon, for example, all limit consumers to make copies only for personal use.¹⁴¹ Apple also limits the number of permitted devices that can play music and how many times music files can be copied to a CD.¹⁴² Music can generally be burned to a physical disc,¹⁴³ but video files cannot generally be burned to a physical disc and must continue to be stored on a digital platform or approved device.¹⁴⁴ These limitations are to ensure that pirated copies do not infiltrate the market, but are substantial limitations on the right to transfer—limitations that do not apply in the same way to the physical copy of media.

¹³⁹ See Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913 (2005); A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001).

¹⁴⁰ 17 U.S.C. § 109(a) ("Notwithstanding the provisions of section 106(3), the owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.").

¹⁴¹ Apple Terms and Conditions, supra note 23 ("Any burning or exporting capabilities are solely an accommodation to you and shall not constitute a grant, waiver, or other limitation of any rights of the copyright owners in any content embodied in any iTunes Product."); Help & Customer Service: Amazon Music Terms of Use, supra note 130 ("We grant you a non-exclusive, non-transferable right to use Purchased Music, Subscription Content, Matched Music, and any additional Music Content we provide you access to through the Services only for your personal, non-commercial purposes, subject to the Agreement."); Google Play Terms of Service, GOOGLE PLAY, http://play.google.com/intl/en_us/about/play-terms.html (last updated July 27, 2016) ("You may not sell, rent, lease, redistribute, broadcast, transmit, communicate, modify, sublicense or transfer or assign any Content or your rights to Content to any third party without authorization, including with regard to any downloads of Content that you may obtain through Google Play.").

¹⁴² Apple Terms and Conditions, supra note 23 ("You shall be authorized to burn an audio playlist up to seven times.").

¹⁴³ Id.

¹⁴⁴ Id. ("You shall not be entitled to burn video iTunes Products or tone iTunes Products.").

e. Right to Devise

It is unclear whether and how these digital files are treated at death. There is no mechanism for beneficiaries to make a request for digital files stored in the deceased account holder's account. Digital platform agreements are usually silent on the issue of devisability of digital media content.145 Digital platform companies may have an interest in not allowing these accounts to be devised, but account holders who have purchased the content have an interest to ensure that the value is not lost. Anecdotally, it appears that these devisability issues are decided on a case-by-case basis. Recently, Apple demanded that a woman obtain a court order to obtain her deceased husband's Apple ID and password in order to retrieve the digital media that he had purchased from Apple. 146 Apple then retreated from its position claiming that the request for a court order was a misunderstanding and solved the problem without a court order. 147 Thus, even though there are no official mechanisms for people to transfer their digital media at death, it appears that people who push the issue obtain favorable results from digital media platforms.

Although an account holder has limits placed on her possession, use, and ability to transfer digital media, these limits are a product of copyright restrictions that apply to the physical form of media as well. Digital media goes a step further by technologically preventing the first sale doctrine from applying to a digital file because the file cannot easily be transferred to a physical medium or to another account. Transfer is still able to occur, however, if a user shares her username and password to files stored on the cloud or attributed to her username on a device. As technology continues to shape or limit the ability to transfer digital files, the right to devise should be preserved. These digital files are replacing physical, tangible goods that were freely devisable. These digital files hold a great deal of monetary value to an estate, and there is no reason why they should not be freely devisable like their physical counterparts.

C. Contracts and Property Interests in Digital Assets

Contracts that control and create digital assets are usually called "Terms of Use" or "Terms of Service Agreement" or "End User License

 $^{^{145}\,}$ Neither Apple nor Amazon expressly states what happens to an account when the holder dies.

¹⁴⁶ James Rogers, *Widow Wins Battle with Apple Over Deceased Husband's Password*, FOX NEWS (Jan. 20, 2016), http://www.foxnews.com/tech/2016/01/20/widow-wins-battle-with-apple-over-deceased-husbands-password.html?intcmp=hplnws.

¹⁴⁷ *Id*.

Agreement." Thus, even in the title of the contract, companies make it clear that they are only offering a service to their members. With this service, individuals create and hold many kinds of digital "things" documents, e-mails, posts, pictures, points, and files. Until the moment of death, an individual has access to a number of accounts, points, and files stored on a computer's hard drive or online in an account. At the moment of death, the question becomes whether all of the rights of access, use, exclusion, transfer, and possession cease immediately. This question is often answered in the affirmative by digital asset companies.¹⁴⁸ But this approach flies in the face of decades of law and tradition in the American succession system, which presumes that people have a right to control what happens to their property at death. 149 The reality is that even digital assets are transferred to another at the death of the account holder—they are either transferred to an account holder's estate or transferred back to the full control of the company who created the platform for the use and creation of digital assets. 150 The issue is whether a property interest to devise these assets overrides contractual terms to the contrary.

The termination of all control and rights of access and ownership at death is justified only if there is no property interest that is capable of descending to an account holder's estate. Companies that wish to uphold limits on descendibility must argue that digital accounts and content in accounts were created at the behest of a contract and that contract limits terms of use, including the use or ability to transfer at death. As a matter of construction, courts often find that the greater power includes the lesser power.¹⁵¹ Thus, in interpreting these contracts, the greater power of creation and control of an asset platform includes the lesser power of controlling the use of digital assets during and after life. But as we have seen in this Section, these contracts create property

¹⁴⁸ See discussion supra notes 5-7.

¹⁴⁹ See RAY D. MADOFF, IMMORTALITY AND THE LAW: THE RISING POWER OF THE AMERICAN DEAD 57 (2010) ("This right to control the disposition of property at death is central to the American psyche. Although people are often vague in their understanding about many aspects of the law, one thing they do know is that they can write a will that controls who will—and who will not—get their property after they die.").

¹⁵⁰ See Lawrence M. Friedman, Dead Hands: A Social History of Wills, Trusts, and Inheritance Law 3 (2009) ("[E]verything will pass on to somebody or something else.").

¹⁵¹ See, e.g., City of Lakewood v. Plain Dealer Publishing Co., 486 U.S. 750, 763–64 (1988) (holding greater power to prohibit speech entirely includes the lesser power to license it at the government's discretion); Posadas de Puerto Rico Assocs. v. Tourism Co. of Puerto Rico, 478 U.S. 328, 345–46 (1986) (holding greater power to ban casino gambling includes the lesser power to prohibit advertising of casino gambling); N.Y. State Liquor Auth. v. Bellanca, 452 U.S. 714, 717 (1981) (holding state's power to ban sale of alcoholic beverages includes lesser power to ban sale of liquor where topless dancing occurs); Davis v. Massachusetts, 167 U.S. 43, 48 (1897) ("[T]he greater power contains the lesser.").

interests in digital assets, and digital assets are so widely used that it is unfair and unjust to allow contracts to shave off property rights that are merely inconvenient to their purposes. In this, the greater power to create a digital asset platform attaches other rights that cannot so easily be dismissed. The power to create a digital asset platform by contract includes the responsibility to honor property interests that follow the creation of a new kind of asset.

Digital asset contracts are form contracts, which means they are standard contracts that a user must agree to in order to use the service provided. These contracts make up the majority of modern commercial and consumer sales contracts. They are contracts that are not negotiated—a party either assents to the terms or does not. A user can choose to use the service or purchase an asset under the terms dictated by a company, or a user can choose to not use the service or purchase an asset. The service provider can unilaterally change terms of the contract such as uses and powers at any time. The majority of form contracts are upheld, despite countervailing arguments that they are invalid due to consent issues. Scholars, courts, and legislatures continue to grapple with the efficacy of non-negotiated form contracts as a matter of contract law.

Because digital assets are created by contract, contract doctrine can apply to prevent unconscionable terms. Unconscionability doctrines apply to limit the power of companies to dictate unfair and unjust terms

¹⁵² See Posadas de Puerto Rico Assocs., 478 U.S. at 363 (Stevens, J., dissenting) (stating that the lesser power to deny advertising violates a constitutional right guaranteed by the Constitution); Bellanca, 452 U.S. at 719 (Stevens, J., dissenting) (questioning the greater-includes-the-lesser-power reasoning as too much power).

¹⁵³ David Horton, Flipping the Script: Contra Proferentem and Standard Form Contracts, 80 U. Colo. L. Rev. 431, 431 (2009) ("Virtually all modern contracts are standard forms."); Russell Korobkin, Bounded Rationality, Standard Form Contracts, and Unconscionability, 70 U. Chi. L. Rev. 1203, 1203 (2003) ("[N]early all commercial and consumer sales contracts are form driven.").

¹⁵⁴ Of course, there may not be a real choice for a user of digital assets in the modern world because some digital assets such as e-mail are becoming so pervasive as to be required to function in society.

¹⁵⁵ See, e.g., Facebook Terms of Service, supra note 6 ("Your continued use of the Facebook Services, following notice of the changes to our terms . . . constitutes your acceptance."); Google Terms of Service, supra note 15 ("[C]hanges addressing new functions for a Service or changes made for legal reasons will be effective immediately.").

¹⁵⁶ See Andrew Tutt, Note, On the Invalidation of Terms in Contracts of Adhesion, 30 YALE J. REG. 439 (2013).

¹⁵⁷ See, e.g., Niva Elkin-Koren, Copyright Policy and the Limits of Freedom of Contract, 12 Berkeley Tech. L.J. 93, 109 (1997); Dennis S. Karjala, Federal Preemption of Shrinkwrap and On-Line Licenses, 22 U. Dayton L. Rev. 511, 512 (1997); Michael J. Madison, Legal-Ware: Contract and Copyright in the Digital Age, 67 Fordham L. Rev. 1025, 1029–32 (1998); Viva R. Moffat, Super-Copyright: Contracts, Preemption, and the Structure of Copyright Policymaking, 41 U.C. Davis L. Rev. 45, 47–50 (2007).

regarding digital assets.¹⁵⁸ For example, unconscionability arises when contract formation was procedurally unfair or substantively unfair.¹⁵⁹ Procedural unconscionability arises when the contract is not negotiated, one party has superior bargaining power, or substantive terms are unreasonably favorable to the party with more power. 160 These factors are all characteristics of digital asset contracts dealing with the issue of inheritability. No digital asset contracts are negotiated, the companies set all the terms in the contracts that can change at any time, and the companies unreasonably deny devisability. In addition, there is a surprising lack of market alternatives. The norm for e-mail and social networking is that the accounts terminate at death.¹⁶¹ Reward points programs, too, are often not transferable at death. 162 Likewise, digital copies of books, music, and videos are tied to an account that terminates at death. 163 There is no digital book retailer that promotes the ability to transfer digital books at death as a reason to pay a little extra for the file. Rather, music, videos, and book retailers all seem to agree that what you are purchasing is a license to the media and not ownership.

Courts could also find that the terms are unconscionable because they are inherently unfair and unreasonable. The remainder of this Article argues that these contracts are inherently unfair because they create assets that users value and for which they might want to control disposition at death. These contracts limit core property interests in that asset despite users' reasonable expectations of inheritability, these contracts deprive individuals of a property right in digital assets, and these contracts change the nature of our property system. Because findings of unconscionability are unpredictable and cannot be relied on to curb an abuse of power in defining digital assets, additional legislation is needed to protect the right to devise digital assets regardless of contractual terms.¹⁶⁴

¹⁵⁸ See David Horton, Unconscionability Wars, 106 Nw. U. L. REV. 387, 393 (2012).

¹⁵⁹ Id.

¹⁶⁰ Williams v. Walker-Thomas Furniture Co., 350 F.2d 445, 449 (D.C. Cir. 1965) ("Unconscionability has generally been recognized to include an absence of meaningful choice on the part of one of the parties together with contract terms which are unreasonably favorable to the other party.... In many cases the meaningfulness of the choice is negated by a gross inequality of bargaining power.").

¹⁶¹ See discussion supra notes 5-7.

¹⁶² See discussion supra notes 5-7.

¹⁶³ See discussion supra notes 5-7.

¹⁶⁴ Legislation has been passed in a handful of states. CONN. GEN. STAT. ANN. § 45a-334a(b) (West 2014); DEL. CODE ANN. tit. 12, § 5004 (West 2016); IDAHO CODE § 15-3-715(28) (2016); IND. CODE ANN. § 29-1-13-1.1 (West 2010); NEV. REV. STAT. ANN. § 143.188 (West 2013); OKLA. STAT. ANN. tit. 58, § 269 (West 2011); 33 R.I. GEN. LAWS § 33-27-3 (2016); VA. CODE ANN. § 64.2-110 (2016).

Digital assets are a form of property. As we have seen, they do not have to have all the qualities of ownership but enough to make it a reasonable requirement that the asset should be capable of being devised at death. This quasi property interest gives people reason to believe that the assets will be transferable at their death, or at least that an individual will choose what will happen to the assets at her death. If an asset is transferable during life, it should be transferable at death. The more digital property functions and operates like physical property, the more likely it is that it should be capable of being devised. The significance of our use, possession, and control of our digital assets is that it gives us a reliance interest in digital assets as property that can be devised according to a decedent's wishes.

II. THEORETICAL JUSTIFICATIONS OF OWNERSHIP

The incidents of ownership apparent in digital assets support the claim that a user holds a property interest in the assets sufficient to allow her to devise the account at her death. Traditional property theories also support the existence of a property right in digital assets. This Part explores three traditional theories that justify the existence of ownership, namely labor theory, utilitarian theory, and personhood theory. Although these theories are not determinative in establishing property interests in digital assets sufficient to allow users to devise the account at death, they further support the argument that courts and legislatures should consider digital assets as property devisable at an account holder's death.

A. Labor Theory

The basic tenet of the labor theory is that people are entitled to property produced by their labor. The labor theory developed from the writings of a seventeenth-century philosopher, John Locke. Locke posited that every person owns her own body and so every person owns the labor that her body performs. 165 "A person owns her own labor because the labor, a self-generated, intentional action, is something the person makes through the exercise of her intellect and will." 166 When a person labors to change or produce something from nature or raw materials for her benefit, she mixes her labor with the resource and this

¹⁶⁵ Gregory S. Alexander & Eduardo M. Peñalver, An Introduction to Property Theory 47 (2012).

¹⁶⁶ Id.

mixing process allows her to acquire property rights to the resource. Labor theory has been interpreted to mean that a creator is entitled to the ownership of something she intentionally creates. Labor theory often justifies the existence of property when a person's labor has added value to a thing that without that labor has less or little value. He Supreme Court has relied on the labor theory to conclude that "a notion of 'property' . . . extends beyond land and tangible goods and includes the products of an individual's 'labour and invention." 170

Another important aspect of labor theory is that Locke assumes that the value of products created is measured by the value of the usefulness of a product to those who created it, not merely the exchange value of a product on the market. Thus, even if a product has a high or low exchange rate on the market, if the labor has created something useful to the creator, a property right is justified. These property rights, however, are limited by the rights others may hold in the raw resources that were used to create a new product. The creator may have an entitlement to a product of the labor, but others or society may have a claim to the raw materials used.

Critics argue that labor should permit a person to receive the value that her labor has added to a thing, but not necessarily title to the thing. The usual reading of Locke's labor theory understands him as saying that, by mixing something she owns (her labor) with something she does not own (the raw material on which she labors), a person comes to acquire a private property right to the object of labor. The problem is apparent in the situation of a landowner who holds title to the land and employs workers to improve her property. The workers mix their labor with the land, but do not take title to the land because the landowner already owns the property. In Locke's traditional

¹⁶⁷ See Haslem v. Lockwood, 37 Conn. 500, 507 (1871) (holding that a person who raked abandoned horse manure into piles and increased its value by labor could recover the value of the manure from the individual who carried away the piles); JOHN LOCKE, TWO TREATISES OF GOVERNMENT 290–91 (Peter Laslett ed., Cambridge Univ. Press 1988) (1690) ("As much Land as a Man Tills, Plants, Improves, Cultivates, and can use the Product of, so much is his Property. He by his Labour does, as it were, [e]nclose it from the Common." (emphasis omitted)).

¹⁶⁸ ALEXANDER & PEÑALVER, supra note 165, at 47.

¹⁶⁹ Haslem, 37 Conn. at 506 ("[A]fter the plaintiff had changed its original condition and greatly enhanced its value by his labor, [the defendant] seized and appropriated to his own use the fruits of the plaintiff's outlay.").

 $^{^{170}}$ Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1003 (1984) (citing J. Locke, The Second Treatise of Civil Government ch. 5 (J. Gough ed., 1947)).

¹⁷¹ ALEXANDER & PEÑALVER, supra note 165, at 49.

¹⁷² *Id*.

¹⁷³ Id. at 146.

¹⁷⁴ LAWRENCE C. BECKER, PROPERTY RIGHTS: PHILOSOPHIC FOUNDATIONS 36-56 (1977).

¹⁷⁵ ALEXANDER & PEÑALVER, supra note 165, at 46.

conception of labor theory, an individual's claim comes from work on common or unowned property. 176 Labor theory, then, applies most strongly to unowned property. In addition, labor theory assumes an unlimited supply of resources. Thus, labor theory is less compelling in a world where property is owned by someone or something and resources are increasingly limited.

Nevertheless, labor theory has justified the existence of property rights in American property law in some form from the very foundation of our country. Labor theory continues to be relevant, and it justifies the existence of intangible property rights in digital assets. This Section explores the ways the labor theory justifies a property interest in e-mail and social networking, reward programs, and digital media, sufficient to allow users to devise these assets at their deaths.

1. E-mail and Social Networking

Perhaps the most persuasive use of the labor theory of property arises in the context of e-mail and social networking. A user has a claim in the contents of an account because the contents of an account were created by her own labor.¹⁷⁷ The text written in e-mail or social networking are "the labor of [the user's] body, and the work of [the user's] hands."178 The labor accomplished to create writing on a social networking platform or e-mail platform support a user's property claim to that writing. This property claim to text created by a user allows a user various incidents of ownership discussed above. When a user writes an e-mail or posts a picture on a social networking site, she is creating something new and something in which either a user or a platform owner, or both, have a property interest. New e-mails and posts are potentially unlimited as a resource that an individual could use to chronicle her life and through her labor create a personal history through e-mails and social networks. Individuals devote a considerable amount of time, effort, and interest in creating social network profiles and in writing e-mails.¹⁷⁹ Labor theory supports the proposition that

¹⁷⁶ LOCKE, supra note 167, at 290-91.

¹⁷⁷ D.F. Libling, *The Concept of Property: Property in Intangibles*, 94 L.Q. REV. 103, 104 (1978) ("Any expenditure of mental or physical effort, as a result of which there is created an entity, whether tangible or intangible, vests in the person who brought the entity into being....").

¹⁷⁸ LOCKE, *supra* note 167, at 287–88.

¹⁷⁹ David Mielach, *Americans Spend 23 Hours per Week Online, Texting*, Bus. NEWS DAILY (July 2, 2013, 11:14 AM), http://www.businessnewsdaily.com/4718-weekly-online-social-mediatime.html.

every person is entitled to the fruits of her labors, and in this case, the fruits of those labors are users' e-mails and social networking posts.

Copyright law arguably protects actual writings of an individual on social media and is a modern day application of the labor theory supporting a property right. The Copyright Act protects an "original work[] of authorship fixed in any tangible medium of expression."180 Courts have acknowledged that e-mail text can be protected by copyright law. 181 Whether texts or tweets can be copyrighted has not yet been determined. 182 Copyright does not apply to facts, ideas, systems, or methods of operation.¹⁸³ Titles, slogans, and headlines are generally not protected by copyright because they are not usually considered a literary work. 184 Originality needs to extend into a longer work in order to be protected. But to the extent that e-mail and other social media posts display originality, they can be protected under copyright law. Copyright is also a descendible interest that should allow a family access to their deceased family member's digital assets. 185 Although labor theory was originally used by Locke to support private property interests in real property, scholars have extended it to justify intellectual property rights. 186

Digital assets allow for individuals to exert labor to create text, pictures, and documents easily. Digital assets allow individuals to publish their work instantly and to share it effortlessly. But this ease in creating and sharing should not diminish the fact that it was through an individual's own labor and creative process that the work came into existence. In a way, e-mail and social networking posts show an incredible display of originality as they chronicle daily life of individuals. Because everyone is different, everyone has a unique and original perspective to share in their social networking posts. To the extent that people create something original in their e-mails and social

^{180 17} U.S.C. § 102(a) (2012).

¹⁸¹ See Innovative Legal Mktg., L.L.C. v. Mkt. Masters-Legal, 852 F. Supp. 2d 688, 698 (E.D. Va. 2012) ("The court finds that Innovative holds a valid copyright in the Email Script...."); Meridian Project Sys., Inc. v. Hardin Constr. Co., 426 F. Supp. 2d 1101, 1113 (E.D. Cal. 2006) (holding the specific expression of text in a "help file" was protectable).

¹⁸² See Michael L. Rustad et al., Copyrights in Cyberspace: A Roundup of Recent Cases, 12 J. HIGH TECH. L. 106 (2011); Consuelo Reinberg, Are Tweets Copyright-Protected?, WIPO MAG., Aug. 2009, at 11, http://www.wipo.int/export/sites/www/wipo_magazine/en/pdf/2009/wipo_pub_121_2009_04.pdf.

^{183 17} U.S.C. § 102(b).

¹⁸⁴ Material Not Subject to Copyright, 37 C.F.R. § 202.1(a) (2016).

¹⁸⁵ 17 U.S.C. § 201(d)(1) ("The ownership of a copyright may be transferred in whole or in part by any means of conveyance or by operation of law, and may be bequeathed by will or pass as personal property by the applicable laws of intestate succession.").

¹⁸⁶ JESSE DUKEMINIER ET AL., PROPERTY 63 (8th ed. 2014) [hereinafter DUKEMINIER ET AL.]; Adam D. Moore, *A Lockean Theory of Intellectual Property*, 21 HAMLINE L. REV. 65, 78 (1997).

networking posts, copyright and the theory that justifies copyright—labor theory—aim to protect this originality as a property interest.

In addition, even though these posts and e-mails may not have economic value on the market, labor theory justifies an ownership interest in a product of an individual's labor even if it only has value to her. The creations in an e-mail or social networking account have value that did not exist before, and they chronicle the life of an individual account user, which creates value to that individual and the individual's relations, if not in the wider market. E-mails and posts may only be of value to the creator or those with a personal interest or emotional bond with an account holder. Nonetheless, this emotional or sentimental value should be protected because labor theory does not look solely to the value on the market in order to justify a property interest. 187

One of the criticisms of labor theory is that it reaches too far, justifying a claim of ownership due to minimal labor. Labor theory does not give users a property ownership interest in an e-mail or social network platform merely because they have added their labor to that platform. No account holder can have a valid ownership claim in Google itself just because she opens an account with Google and begins using its services. An opposite result would be beyond reason and would clearly violate the precepts of labor theory as users did not labor to create the platform itself. Users, however, do not claim an ownership interest in a platform. Rather, there is a claim of ownership interest in the actual content that users have created and stored on the platform by "mixing" their labor with a platform that encourages that kind of individual labor to exist.

By extension, because account holders do not have an ownership interest in a platform, labor theory most likely does not support a claim of ownership in the ability to access an e-mail or social networking account. Access could be denied if an account holder misused a platform, if a platform stopped operating, or if an account holder died. But because an account holder has a property interest in the content of an account, if access is denied, the platform should allow a user the opportunity to obtain the contents of an account that has been created by a user's labor. Access may be denied at a user's death because the password to an account has been lost with the death of the user. Labor theory supports a claim of property ownership in any creations that are

¹⁸⁷ Alexander & Peñalver, *supra* note 165, at 49.

¹⁸⁸ Adam Mossoff, *Locke's Labor Lost*, 9 U. CHI. L. SCH. ROUNDTABLE 155, 156 (2002) ("It is the idea of 'mixing labor' as the mechanism for creating property that has proven to be the Achilles heel exposed to contemporary commentators").

stored in the account. This property interest is held by the deceased user and descends as a matter of law to her beneficiaries or heirs.

2. Reward Programs

Labor theory is more difficult to apply to reward programs because there are no raw materials that an account holder, through her labor, develops into a finished product, which gives rise to a property claim. Instead, reward programs are instituted by a company as a marketing tool to gain loyal customers. Labor theory may apply by extension, however, as individuals labor to earn points in a system of rewards, perhaps paying more to stay at a specific hotel or fly with a particular airline. Labor theory justifies a property interest in tangible and intangible goods that are products of an individual's labor. 189 To the extent that individuals purchase items or services relying on a company's promise of rewards and points, a property interest is justified in rewards earned. A consumer's labor produces an accumulation of points and miles that should be descendible and devisable.

3. Digital Media

Digital media is purchased by consumers and perhaps is the most like tangible personal property. Digital books replace physical books, digital music and movie files replace physical tapes, records, CDs, videocassettes, and DVDs. These physical copies of electronic media were purchased by consumers in the same way digital copies are purchased by consumers. Although labor theory can only be applied tangentially, it still supports the argument that an individual's labor to earn wages justifies her property ownership over tangible or intangible goods she purchases with those funds. Because an individual has labored to purchase goods, these goods are the fruit of her labor, and labor theory supports a claim of ownership. Digital media files are considered personal property, even by the companies that sell them, and, as a property interest, these files should be devisable and descendible.

Labor theory justifies a claim of the right to devise digital assets at death. These assets were created by the labor of an individual, accumulated by the labor of an individual, or purchased through the

¹⁸⁹ Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1003 (1984) (citing J. Locke, The Second Treatise of Civil Government ch. 5 (J. Gough ed., 1947)).

labor of an individual. The American system of property law honors property claims based on individual labor. This theory continues to apply in the digital world as a new form of property emerges.

B. *Utilitarian Theory*

Utilitarian theory justifies private property to the extent that the existence of property maximizes the overall happiness, utility, and welfare of society. Under this theory, all property rights are defined in order to promote the interests of society, and private property is favored over communal property when private ownership secures the greatest social benefit.¹⁹⁰ Utilitarian theory has been embraced by American courts as they consider property rights in the modern world.¹⁹¹ The proponent or creator of the utilitarian theory was an eighteenth-century philosopher named Jeremy Bentham. Bentham posited that the conception of property and law were human inventions and did not derive from natural law.192 In this way, utilitarian theory differs from labor theory because it is not based on a concept of natural law. 193 Instead, utilitarian theory embraces the concept that property is a human institution and a way for humans to organize the society in which they live. 194 Bentham argued that legislatures craft property law and should do so in a way that maximizes societal happiness. 195 Utilitarian theory supports private property because clear ownership allows individuals to invest in their property and to contribute to the economy. Clear ownership also discourages conflict, which maximizes social welfare and happiness. Utilitarian theory is based on consequences of property decisions and evaluates the effect of these consequences on the overall good of society. 196

¹⁹⁰ Patty Gerstenblith, *Identity and Cultural Property: The Protection of Cultural Property in the United States*, 75 B.U. L. REV. 559, 568 (1995) ("A second justification for private property ownership is the utilitarian theory that society as a whole benefits from private, as opposed to communal, ownership of various forms of property.").

¹⁹¹ State v. Shack, 277 A.2d 369, 372 (N.J. 1971) ("Property rights serve human values. They are recognized to that end, and are limited by it."); DUKEMINIER ET AL., *supra* note 186, at 51 ("Utilitarian theory is, without a doubt, the dominant view of property today").

¹⁹² JEREMY BENTHAM, THE THEORY OF LEGISLATION 69 (Oceana Publications, Inc. 1975) (1802) ("Property and law are born together, and die together. Before laws were made there was no property; take away laws, and property ceases.").

¹⁹³ DUKEMINIER ET AL., supra note 186, at 51.

¹⁹⁴ *Id*.

¹⁹⁵ BENTHAM, *supra* note 192, at 69 ("[W]hat is essential to the happiness of society; when he disturbs it, he always produces a proportionate sum of evil.").

¹⁹⁶ ALEXANDER & PEÑALVER, supra note 165, at 11-12.

One of the main criticisms of traditional utilitarianism is that happiness cannot be measured. Without an objective measure, it is difficult to use utilitarianism to define property rights as one decision may increase the happiness and welfare of one group by marginalizing the happiness and welfare of another group. Economists have given utilitarianism an objective measure.¹⁹⁷ Instead of using abstract happiness to guide property allocation, economists use money. Under an economic utilitarian approach, private property is justified to the extent that it increases the overall wealth of society. Law and economic utilitarian theory requires a free market in goods and services, and property law merely encourages voluntary transactions between private individuals. Property law exists to incentivize and encourage progress and development. The law and economic utilitarian theory are also criticized as focusing too much on money and not enough on other basic human needs and social utility.¹⁹⁸

There are many different strands of utilitarian theory, but this Article explores utilitarian theory as the concept of maximizing both the economic good of society as well as the social welfare and happiness of society. 199 Utilitarian theory is flexible and could be used to justify not allowing digital assets to be devised for the good of society and economic well-being. Arguments made in this Article supporting the right to devise under the utilitarian theory are certainly not exhaustive. Utilitarian theory justifies property ownership of digital assets, at least sufficient to allow a right to devise digital assets, because society has an interest in allowing individuals to devise property. Minimal harm to companies would occur, and the definitions of property should continue to be made by society and not through the tyranny of adhesion contracts.

Utilitarian theory posits that we must define property interests in a way that promotes the good of society.²⁰⁰ In the world of digital assets, private contracts dictate the property rights that we hold in digital assets. These contractual terms, however, cannot override property principles. For example, in landlord-tenant agreements, courts and legislatures impose the warranty of habitability and forbid parties from contracting for housing that does not meet a certain standard of

¹⁹⁷ Harold Demsetz, Toward a Theory of Property Rights, 57 Am. ECON. REV. 347 (1967).

¹⁹⁸ See generally Eduardo M. Peñalver, Land Virtues, 94 CORNELL L. REV. 821 (2009); Jeanne L. Schroeder, Rationality in Law and Economics Scholarship, 79 OR. L. REV. 147 (2000).

¹⁹⁹ ALEXANDER & PÉÑALVER, supra note 165, at 11 ("[T]he term utilitarian masks a great deal of intellectual and methodological diversity.").

²⁰⁰ DUKEMINIER ET AL., *supra* note 186, at 51.

habitability.²⁰¹ As a society, we define property in the way that promotes societal interests. For example, human organs are surely things, but we fail to recognize them as property that can be transferred for sale because of utilitarian concerns that impoverished people would be exploited or the altruistic market for donating would cease.²⁰² Similarly, we should define digital assets as property interests that are devisable for the good of society. Because of the prevalence of digital assets, if we do not take measures to define the property rights that cannot be contracted away, our perception of ownership in digital media will be destroyed and controlled by companies offering digital assets. We will no longer have control or property interests in our communication, new forms of currency, or digital media.

1. E-mail and Social Networking

Individuals have an interest in determining what occurs to their email and social networking accounts when they die. By promoting laws that allow an individual to choose what happens to her account whether it is destroyed or devised—property law will maximize social welfare. These accounts hold an immense amount of personal information about individuals' daily lives. Individuals have an incentive to make sure that this information held in their e-mail or social networking accounts is treated in the way they wish. American property law has always honored the distribution requests of an individual and the right to devise,²⁰³ and there is no reason why e-mail and social networking accounts should be any different. If an individual wants an account destroyed at her death, then she should be able to make that known. If she wants it devised to her family members, then they should be able to access and retain it. Honoring testamentary intent honors the dead, allows individuals to consciously plan for the future of their digital accounts, and prevents conflict and litigation after an account holder

²⁰¹ See, e.g., COLO. REV. STAT. ANN. § 38-12-503 (West 2007); IOWA CODE ANN. § 562A.15 (West 1992); VT. STAT. ANN. tit. 9, § 4457(a) (West 2007); Landis & Landis Constr., L.L.C. v. Nation, 286 P.3d 979, 984 (Wash. Ct. App. 2012) (holding that rodent infestation is an actionable breach of the warranty of habitability).

²⁰² The National Organ Transplant Act § 301, 42 U.S.C. § 274e (2012) (forbidding sale of human organs for valuable consideration); see also Lloyd R. Cohen, Increasing the Supply of Transplant Organs: The Virtues of a Futures Market, 58 GEO. WASH. L. REV. 1, 25–26 (1989) (discussing ethical issues with a market approach to organ exchange).

²⁰³ Hodel v. Irving, 481 U.S. 704, 716 (1987) (recognizing the power to devise property as part of the "Anglo-American legal system since feudal times"); JESSE DUKEMINIER & ROBERT H. SITKOFF, WILLS, TRUSTS, AND ESTATES 1 (9th ed. 2013).

dies while a family tries to obtain access to an account.²⁰⁴ When an individual creates an e-mail account or posts information, pictures, or videos on a social networking site, she will know that her control over these accounts, like her physical property, extends beyond death. Allowing individuals to protect their accounts after death maximizes social welfare and happiness.

Economically, e-mail and social network accounts are not worth much on an open market. The financial burden of allowing contents of an account to transfer to an account holder's beneficiaries falls on the platform. These costs, however, could easily be mitigated by allowing the platform to assess nominal fees for accessing content.²⁰⁵ If the law allows e-mail and social networking accounts to be devised at death, the law can also require that the expense of doing so be transferred to those seeking the content of the account. Economically, there is no undue burden on the platforms to allow this transfer to occur. In some situations, the contents of an account holder's e-mail or social networking account will be very valuable. The e-mail account of public figures, for example, could possibly be worth a large amount. A public figure's next of kin should be able to capitalize on that value instead of allowing a third party platform like Google to sell the contents of a deceased person's account. Under the utilitarian theory, allowing individuals a property interest in their e-mail and social networking accounts sufficient to devise these accounts is economically sound and efficient.

2. Reward Programs

The utilitarian theory also favors allowing individuals a property right in their reward points sufficient to devise those points upon their death. Allowing reward points to be devised promotes social happiness because individuals desire to pass on their accumulated currency to their family or friends. One of the marketing tools of reward programs is playing on a consumer's desire to accumulate. As James Ely wrote, "A widely shared desire to acquire and enjoy property has long been one of the most distinctive features of American society." Once consumers have acquired these points, they can use the points much like they use a

 $^{^{204}\,}$ Restatement (Third) of Prop.: Wills and Other Donative Transfers § 10.1 cmts. a, c (Am. Law Inst. 2003).

²⁰⁵ As we saw in Section I.B.2.d, reward programs often charge a "processing fee" in order to transfer rewards between account holders. *See* discussion *supra* notes 115–16.

²⁰⁶ James W. Ely, Jr., The Guardian of Every Other Right: A Constitutional History of Property Rights, at xi (3d ed. 2008).

currency, buying and purchasing a variety of goods and services. Unlike the currency of cash, however, terms of service agreements often prohibit the points from being descendible or devisable. One of the reasons consumers accumulate property is to enjoy the ability to decide what will happen to it when they die.²⁰⁷ A core principle of American succession law is that an individual's testamentary intent, not private contract, dictates what occurs to her property at her death.²⁰⁸ Reward contracts that go against this principle of American law maximize the company's welfare at the expense of society's welfare. Throughout the history of our nation, Americans have honored testamentary intent controlling the disposition of currency. Reward programs function much like a currency, but do not allow customers to devise the rewards even if rewards have not yet expired. In effect, death automatically allows the companies to seize unredeemed rewards, disincentivizes consumers from engaging in estate planning and ignores the time-honored tradition of allowing testamentary intent to dictate how accumulated property is distributed at death.

Allowing reward points to be devised would not have an adverse economic effect. In 2011, it was estimated that Americans earned about \$48 billion in frequent-flier miles, hotel rewards, credit card points, and other loyalty programs, and companies estimated that nearly one-third of those rewards went unused.²⁰⁹ If one-third of the rewards earned by living Americans go unused each year, it is unlikely that allowing these rewards to be devised when an account holder dies will make a significant difference. Companies already put expiration dates on the earned rewards, and those expiration dates would continue to apply even if the points were devised to beneficiaries. Any expense of transferring the reward points to a new account could be passed on to beneficiaries. Companies have already distributed the reward points and obtain a windfall when they are not used. Allowing beneficiaries to use the reward points also encourages economic development and growth as companies target new potential consumers. There is little indication that allowing reward points to be devised would hamper economic growth. As a matter of utilitarian theory, recognizing a right to devise in reward programs is justified because doing so maximizes both social and economic welfare.

²⁰⁷ MADOFF, supra note 149, at 6-7.

 $^{^{208}}$ Restatement (Third) of Prop.: Wills and Other Donative Transfers § 10.1 cmts. a, c (Am. Law Inst. 2003).

²⁰⁹ Ron Lieber, *All About Your Unused Rewards Points*, N.Y. TIMES: BUCKS (Apr. 19, 2011, 3:53 PM), http://bucks.blogs.nytimes.com/2011/04/19/all-about-your-unused-rewards-points/? _r=0.

3. Digital Media

Utilitarian theory also supports consumers having a property interest in digital media sufficient to devise files at death because allowing distribution at death promotes social and economic well-being. As a matter of social well-being, consumers expect to be able to devise their digital media collections just as they have for years devised their physical media collections. Consumers invest a lot of money into their digital media collections with the expectation and desire that they will be able to pass on these files to their beneficiaries at their death. In order for consumers to feel secure in their digital media purchases, the law must allow consumers to be able to devise these digital files and treat them like physical assets.

The argument against allowing digital media to be devised is that without limits on devisablity, consumers would transfer files to their beneficiaries, and their beneficiaries would receive them as a gift instead of purchasing them from a company directly, which would deny the company and creators the financial resources they otherwise would have received. Allowing digital media to transfer at death will not cause economic damage to digital media providers. As society continues to progress, digital files devised in 2016 will be nearly obsolete in the future the same way video cassettes are nearly obsolete in 2016. Thus, by allowing distribution of digital media files, the companies are not going to irrevocably lose a stream of income for the purchase of those files. In time, when a new and better format arrives to listen to music, view videos, or read books, consumers will adapt to a new format and purchase their favorite media again.

If people know they will be able to devise their digital media, they will invest more freely in purchasing and accumulating digital media because they and their beneficiaries will reap the rewards of that investment. They will be more encouraged to plan their estate because if they do not, their estate will bear the loss of not being able to transfer these valuable digital files. They may be willing to pay more for a digital file, knowing that the file will always be theirs or will transfer to their beneficiaries.

C. Personhood Theory

Personhood theory stems from the idea that people define themselves and their identity through property.²¹⁰ Philosopher Georg

Hegel opined that a person creates a property claim by putting his will or personhood into an object.²¹¹ Margaret Radin has added and enhanced the personhood theory. She posits that the personhood theory comes into play when people feel their property is "almost part of themselves."212 Under the personhood theory, property should be understood as "part of the way we constitute ourselves as continuing personal entities in the world."213 In order for a person to be fully developed, Radin theorizes that "an individual needs some control over resources in the external environment. The necessary assurances of control take the form of property rights."214 Personhood justifies the existence of property in those things that are central to our character and emotional or psychological well-being. It has less import to generic property. Radin divides property into "personal property," which is bound up with personal development and cannot be replaced, and "fungible property," which is not bound up with personal development and can more easily be replaced.²¹⁵ Context matters in describing what kind of property protections are afforded to a thing. As Radin describes, personal property that may have more meaning to an individual consists of objects like a "wedding ring, a portrait, an heirloom, or a house." 216 Because of a greater attachment to these kinds of irreplaceable objects, the law implicitly protects our rights to a greater extent.²¹⁷ Personal objects have greater legal protection than general wealth; for example, homes are more protected than fungible accounts.²¹⁸ Personhood theory supports the existence of property in objects that contribute to selfdevelopment and then encourages greater legal protection for these items than for fungible property. Personhood theory also justifies the existence of a property interest in digital assets and supports finding a right to devise digital assets. If generic property that has no claim to developing personhood is devisable, then digital property that has a direct correlation with personal identities should also be devisable.

²¹¹ GEORG WILHELM FRIEDRICH HEGEL, THE PHILOSOPHY OF RIGHT 23 (T.M. Knox. trans., Encyclopedia Britannica 1952) (1821) ("A person has as his substantive end the right of putting his will into any and every thing thereby making it his.").

²¹² Margaret Jane Radin, Property and Personhood, 34 STAN. L. REV. 957, 959 (1982).

²¹³ *Id*.

²¹⁴ Id. at 957.

²¹⁵ Id. at 960.

²¹⁶ Id. at 959.

²¹⁷ Id. at 990-91.

²¹⁸ Id. at 1007.

1. E-mail and Social Networking

Personhood theory most strongly supports a claim of property in e-mail and social networking accounts. These accounts are more like tangible personal property identified by Radin as personal. Like heirlooms, jewelry, or our houses, we personally identify with our e-mail and social networking accounts. Colloquially, we refer to them using terms of ownership and think we control how our e-mail and social networking accounts are used. Our e-mail and social networking accounts show how "we constitute ourselves as continuing personal entities in the world."219 In many ways, our e-mail and social networking accounts are how the world sees us and how we see ourselves. Social networking sites have begun to serve as a virtual memorial when an individual dies, allowing family and friends to publicly mourn together.²²⁰ E-mail and social networking posts can be seen as an extension of ourselves into the digital realm. Colloquially, we talk about e-mails and social networking accounts in terms of ownership and possession.

E-mail is the correspondence of nearly 2.6 billion users worldwide.²²¹ It is estimated that in 2015, 205 billion e-mails were sent each day.²²² The scope of e-mail use is overwhelming and demonstrates the prevalence of e-mail in everyday life. E-mail accounts contain an immense amount of personal and private business information and this information accumulates at a rapid pace. E-mails are the new letters and correspondence of the digital age and reflect the same amount of personality as tangible private letters that are descendible.

Social networking accounts also store an immense amount of personal information. Social scientists can actually predict personality

²¹⁹ Id. at 959

²²⁰ Lisa Belkin, Facebook After Death, N.Y. TIMES: MOTHERLODE (May 25, 2010, 12:30 PM), http://parenting.blogs.nytimes.com/2010/05/25/facebook-after-death/?_r=0 (reporting a mother's account of how her son's Facebook page helps her grieve with others); Mathew Ingram, Death and Facebook: Blurring the Line Between Real and Virtual, BLOOMBERG (Nov. 14, 2012, 11:13 AM), http://www.businessweek.com/articles/2012-11-14/death-and-facebook-blurring-the-line-between-real-and-virtual; Annie Johnson, Online Memorials Help Students, Families Cope with Loss, USA TODAY (Dec. 20, 2013, 3:38 PM), http://www.usatoday.com/story/tech/2013/12/20/online-memorials/4145385; Jaweed Kaleem, Death on Facebook Now Common as 'Dead Profiles' Create Vast Virtual Cemetery, HUFFINGTON POST (Dec. 7, 2012, 3:40 PM), http://www.huffingtonpost.com/2012/12/07/death-facebook-dead-profiles_n_2245 397.html.

²²¹ THE RADICATI GRP., EMAIL STATISTICS REPORT, 2015–2019 (2015), http://www.radicati.com/wp/wp-content/uploads/2015/02/Email-Statistics-Report-2015-2019-Executive-Summary.pdf.

²²² Id.

traits from social networking posts.²²³ A recent study tracked Facebook users' "likes" and found that using this information, researchers could accurately predict sexual orientation, religion, political views, and even a user's parent's marital status.²²⁴ Social media accounts allow users to express their personhood to friends and the public. Self-development takes place when individuals write, post pictures, and upload documents to their account. Twitter expressly adopts the personhood theory in its terms of service agreement by stating that "what you say on the Twitter Services may be viewed all around the world instantly. You are what you Tweet!"²²⁵

If the contents of e-mail and social networking accounts are not devisable at death, family members lose an irreplaceable form of property that reveals more about the life and personhood of a decedent than any other form of tangible property. Personhood theory supports justifying e-mail and social networking accounts as devisable property because of the unique and intimate ties these accounts have with personal self-development and identity.

2. Reward Accounts

Reward accounts have less direct personal link and function more like a currency that individuals use for different kinds of purchases. As more "fungible" goods, personhood theory does not directly support their existence as a property right or advocate for increased protection. There is a claim, however, that reward points indicate the amount of consumerism in which an individual engages. A frequent flyer might identify with a certain airline more than another airline, and that loyalty could be seen as a form of personal attachment. Individuals could show preferences for brands that reveal their personality or character traits. The rewards that an individual has accumulated during her life cannot be easily replaced. These arguments for applying personhood theory, however, are weak. Reward points function like cash and other forms of currency and should be devisable based on their similarity to tangible personal property, not on their ability to aid individuals in self-development.

²²³ Michael Kosinski, David Stillwell & Thore Graepel, *Private Traits and Attributes Are Predictable from Digital Records of Human Behavior*, 110 PROC. NAT'L ACAD. SCI. U.S. 5802 (2013), http://www.pnas.org/content/110/15/5802.full.

²²⁴ Id.

 $^{^{225}\,}$ See Twitter Terms of Service, supra note 6.

3. Digital Media

Personhood theory can apply to digital media to strengthen claims for allowing this media to be descendible. Digital media functions like personal property and reveals much about an individual's personal taste in movies, books, and music. Just as we would want a physical library of books, movies, and music to descend to a decedent's heirs, we also should support allowing digital files of this sort to descend. The entertainment we enjoy helps us place ourselves in the context of the wider world and aids personal development. There is a direct tie between the media we have purchased and the reflection of that media on our personality and character traits. Because this media reveals much about who we are as people, there is a greater argument that it, like its physical counterparts, should be descendible and devisable.

Traditional property theories applied to digital assets reveal a theoretical justification for finding that an account holder has a property interest in her digital assets sufficient to devise the assets upon her death.

III. THE RISE OF DIGITAL FEUDALISM

Nearly 1000 years ago, feudalism evolved from William the Conqueror's invasion of England. Feudalism was a property and political system instituted by the king in order to encourage loyalty and fidelity from his subjects.²²⁶ All land was held by the king, who in turn granted parcels to his loyal followers.²²⁷ These "tenants-in-chief" gave their loyalty to the king and pledged to provide military service and financial remuneration.²²⁸ The tenants-in-chief acquired loyal followers for themselves and subdivided the land to give to "mesne lords," who took on similar oaths of loyalty, military service, and financial remuneration.²²⁹ At the bottom of the feudal pyramid were the peasants or serfs who actually possessed and worked the land. They had few rights and were forced to work the lord's land for the lord's profit.²³⁰

²²⁶ Alfred C. Yen, Western Frontier or Feudal Society?: Metaphors and Perceptions of Cyberspace, 17 Berkeley Tech. L.J. 1207, 1233–34 (2002).

²²⁷ Id. at 1233.

²²⁸ Id.

²²⁹ Id

²³⁰ *Id.* at 1235. Some were free men who owed specific duties to their lord, but most were not free and were exploited at the whim of the lord of the land on which they worked. *Id.*

Originally, a possessor of land could not devise or convey a title to the land without first obtaining the lord's permission. Discontent at not being able to devise or convey land contributed to the passage of the Statute Quia Emptores, which was enacted in 1290.²³¹ Under the Statute Quia Emptores, the inferior possessors were allowed to devise their property without obtaining the lord's permission, but the new possessor of land held the same obligations of feudal ownership.²³² The Statute Quia Emptores became enshrined in the common law, and physical and intangible property has been devisable in the Anglo Saxon system ever since. Our understanding of property stems from an awareness that we will all die at some point and leave everything we have owned, created, and touched behind.²³³ We expect that we can decide where our property and assets go at death. These expectations and common law norms have defined property interests since the Statute Quia Emptores, and they should extend to property held in digital form.

Like the peasants under a true feudal system, account holders of today's digital assets lack power over their digital assets. They receive what corporations allow them to receive and nothing more. In this sense, corporations are the true owners of digital assets and when account holders die, assets revert back to the companies from which account holders purchased or accumulated them. In present possessory estate terms, corporations own a fee simple interest in digital assets and lease these assets to customers for their limited use or for a limited time. Individuals own some kind of lesser interest like a leasehold or a life estate in digital assets. I have characterized this shift in property ownership and control as "digital feudalism."

If society, legislatures, and courts fail to curtail the power of adhesion contracts of digital assets, society will continue to see the rise of digital feudalism. As discussed above, digital assets hold the incidents of property ownership and three traditional property theories justify the claim of ownership in digital assets; yet, the right to devise digital assets is still severely limited and controlled by private contracts. These private contracts control and limit our property interests in digital assets in an unwarranted fashion.²³⁴ Although the feudalism metaphor does not apply directly to digital assets,²³⁵ the shift of property ownership is characterized by the same principles that drove the ancient feudal

²³¹ SPRANKLING & COLETTA, supra note 35, at 313.

²³² Ronald Benton Brown, *The Phenomenon of Substitution and the Statute Quia Emptores*, 46 ST. LOUIS L.J. 699, 709 (2002).

²³³ MADOFF, supra note 149, at 6-7.

²³⁴ See generally Banta, supra note 5.

 $^{^{235}}$ Digital asset companies, for example, lack the subfeudination that characterized a feudal system, a sort of archaic pyramid scheme.

system under William the Conqueror. There are at least three key characteristics that the digital assets property system and a traditional feudalistic property system share: absolutism, hierarchy, and a concentration of power. By denying the right to devise digital assets, companies are embracing an archaic and anti-democratic property system, which lacks individual ownership and control.

A. Absolutism

Traditional feudalism is characterized by absolutism, where tenants had no real choice in how to manage or occupy their property and had to receive consent and direction from the lord of the property. In a feudal system, property rights are defined by the lords. American democracy rejected this absolute control of property by feudal lords and instead established a system where property rights are defined by law.²³⁶ American law expressly rejected the idea that a person had absolute control over real property and the people who lived on it.²³⁷ To this end, American law has prohibited some provisions and kinds of contracts that are incompatible with a free society. Legislatures provide limits that cannot be denied by contractual language. For example, after the Thirteenth Amendment was passed, no contract could be enforced for the ownership of a human being.²³⁸ In more modern times, legislatures required that all leasing contracts uphold a certain standard of habitability.²³⁹

Digital asset contracts introduce a new form of absolutism where the power and control over the assets are determined by a terms of service agreement. These adhesion contracts require a user to click that they agree to the terms in order to continue using the service or purchasing the asset. There is no room for negotiation and no expression of intent.²⁴⁰ Digital asset providers require acceptance of the terms of their agreement in order to use the service. Because all digital

²³⁶ Joseph William Singer, Democratic Estates: Property Law in a Free and Democratic Society, 94 CORNELL L. REV. 1009, 1051 (2009).

²³⁷ State v. Shack, 277 A.2d 369, 372–73 (N.J. 1971) ("Title to real property cannot include dominion over the destiny of persons the owner permits to come upon the premises.... A man's right in his real property of course is not absolute.").

 $^{^{238}}$ U.S. Const. amend. XIII ("Neither slavery nor involuntary servitude \dots shall exist within the United States \dots ").

 $^{^{239}}$ See, e.g., Colo. Rev. Stat. Ann. § 38-12-503 (West 2007); Iowa Code Ann. § 562A.15 (West 1992); Vt. Stat. Ann. tit. 9, § 4457(a) (West 2007); Landis & Landis Constr., L.L.C. v. Nation, 286 P.3d 979, 983 (Wash. Ct. App. 2012) (holding that rodent infestation is an actionable breach of the warranty of habitability).

²⁴⁰ Tutt, *supra* note 156, at 441-42.

asset providers have some terms of service agreement, customers have no alternative choice in the market. If digital asset providers decide that digital assets are not devisable, their decision is absolute. In addition, the contents of these contracts can change at any time with little notice.

In the digital asset context, there are only three options available for their transfer after death: either they transfer back to the company's sole control, the company deletes them, or they transfer to the account holder's estate. Because account holders have the right to exclude, possess, use, and transfer during life, they have the expectation and understanding that they should also have the right to devise these assets at death. Contractual language that voids such an essential right of ownership should be held unconscionable.²⁴¹ Upholding a contractual ability to limit the devisability of an asset that has so many incidents of ownership, and which property theories support as personal property, invites the rise of a form of digital feudalism: a system characterized by an imbalance of power between digital asset platforms and consumers, where consumers and account holders lose all of their assets created, earned, or purchased during their life at death. Such a system challenges the very foundation of American property law.

Under these contracts, users are mere life-tenants to corporations that have created digital platforms. Account holders enjoy digital assets for as long as corporations allow users to have them. Account holders have a life estate, a license, or a form of tenancy in e-mail accounts, reward points, and digital media that terminates upon death. Account holders' interests in their digital assets is tenuous at best. Without legislation, account holders' interests in digital assets can be changed, taken, or destroyed at any time by their digital overlords. There is no way to purchase digital media or earn reward points that allows transfer upon death unless a company decides to allow it. Policies that prohibit individuals from choosing how their digital assets are treated at death only benefit a company or digital platform. There is no benefit to an account holder who continues to write, accumulate, and purchase digital assets with no way to devise them. Nor can companies justify this lack of ability to devise by arguing that the digital formats are less expensive. In many cases, the digital formats of videos, music, and books are the same price as their physical counterparts, and the physical copies may still be devised by an owner at her death.²⁴²

²⁴¹ See supra Section I.C.

²⁴² See Emily Tamkin, Paying to Have and Not to Hold, SLATE (Oct. 25, 2016, 3:56 PM), http://www.slate.com/articles/technology/future_tense/2016/10/we_re_increasingly_paying_more_to_get_the_digital_version_of_a_product.html (noting examples in which consumers are paying more for a digital version of a book or movie than a physical copy).

These digital assets create a feudalistic system through private contract. In doing so, these private contracts change the nature of our property system and threaten the system that a democratic government protects. The tyranny of contract cannot change the very nature of property. We may need to reassess the viability of property in the digital world, but some fundamentals of property are so important to our democratic system that we need to ensure that these are protected. Arthur Lee said property is the "guardian of every other right" and modern legal historian, James Ely, has continued to argue that property rights are equal in status to all other constitutional rights.²⁴³ Account holders possess and use our digital assets enough to create a claim of ownership in them that should allow us to transfer these assets at death. By protecting property rights, American law protects democracy and every other constitutional right.

B. Hierarchy and Concentration of Power

Feudalism was characterized by a strong hierarchy and concentration of ownership and power. No one was a true owner but the king. The American system rejected a hierarchal and concentrated form of ownership and instead dispersed property among equal persons. Hierarchy is difficult to dismantle, but over time American law has embraced equality. After (too) many years, hierarchal social relationships regarding property were discontinued under the law: slavery was abolished, married women were able to hold property, and discrimination was banned in housing and services. The American property system disfavors restraints upon alienation, fee tails, and land encumbered by conditions or future events.²⁴⁴ The rule against perpetuities prevents future interests held by transferees from vesting too far into the future.²⁴⁵ The American system embraces the fee simple as the dominant and preferred title of ownership, a title that is free from hierarchal control or obligation.

Digital asset platforms reinvigorate a hierarchal property system over digital assets, where individuals no longer hold a fee simple in their digital property. This concentration of power has resulted in a loss of the right to devise digital assets. Companies are able to control the use of digital assets long after an individual has purchased it. For example, once an individual purchases a song on iTunes, she can only make six

²⁴³ ELY, supra note 206, at 26.

²⁴⁴ SPRANKLING & COLETTA, supra note 35, at 315, 320.

²⁴⁵ Id. at 369.

copies of that song.²⁴⁶ Although she owns the digital file, her ability to transfer it to new devices is limited by a condition placed on the property by Apple when she purchased the file. In addition, an account holder has no ability to devise assets at death or ensure that sensitive emails or assets are deleted. Further, individuals must petition a digital asset platform in order to receive access to an account after an account holder's death. The digital asset platform makes the decision about whether to release the contents of the account or not. Account holders are entirely dependent on the good will of companies in honoring their requests. This kind of concentration of power is repugnant to a system of property that favors outright ownership and the right to devise personal property.

C. Digital Feudalism and American Law

If we continue to allow companies to drive policy and outcomes relating to property interests, we will lose the cherished right to devise. We can encourage production and creation of digital platforms and still require digital platforms to allow a way for these accumulated or created property interests to be devised. The feudalistic system will continue to rise unchecked if we leave the result to market pressures. Market pressures to encourage devisability are inherently flawed because individuals do not easily confront their mortality. Only about a half of Americans have executed a will to control the disposition of their assets at death.²⁴⁷ Customers, on the whole, do not make decisions about creating, accumulating, or purchasing digital assets based on how those assets will be treated at death. Policies that do not allow devisability capitalize on Americans' apathy about estate planning and sense of immortality by not making these assets available to devise. We cannot rely on the market or companies to grant devisability on their own. Legislation is the only way to truly safeguard and protect the right to devise. The decision of whether digital assets are property lies in state legislatures as opposed to private contractors. Texas, for example, has recently modified its property code definition of the term property to include "property held in any digital or electronic medium." 248 Using our democratically-elected representatives to define property is the only way to eschew feudalistic tendencies of allowing rich and powerful corporations from making the decisions for us.

²⁴⁶ Apple Terms and Conditions, supra note 23.

²⁴⁷ See DUKEMINIER & SITKOFF, supra note 203, at 63.

²⁴⁸ TEX. PROP. CODE ANN. § 111.004(12) (West 2015).

Under the Civic Republican Theory, ownership of private property is justified to the extent that it incentivizes democracy.²⁴⁹ Owning private property allows citizens to have the economic position to exercise independent judgment about politics. Citizens who do not own land but are dependent on other landowners for their livelihood are subject to economic pressure and manipulation in the political process.²⁵⁰ Similarly, individuals who do not have an ownership claim in their digital assets are subject to exploitation by digital asset overlords. Digital media, for example, is sold for the same price as physical media but is encumbered in a way that physical media is not. In some ways, consumers have already become digital tenants of corporations like Apple and Amazon. Policies often indicate that consumers are only purchasing a "license" to the material, and consumers are unable to sell their copies under the first sale doctrine or devise their copies at their deaths.

After one hundred years of feudalism, a statute was passed to limit the rights of lords and allow individuals to pass on property to their next of kin.²⁵¹ The Statute Quia Emptores stands today as a reminder of a time when the powerful few could limit the ability to devise of an entire population.²⁵² History is repeating itself in a digital age. As the Statute Quia Emptores was used to limit the power of feudal lords in the first instance, statutory protection is needed again to ensure individual property rights in digital assets. The dangers of a feudalistic digital property system are real, and only a statutory response can adequately address the limits that adhesion contracts place on digital property.

Digital assets are, in a way, a cautionary tale. They may have been the first instance where corporations created a tenancy in digital assets instead of outright ownership, siphoning off payments as some sort of landlord. This trend, however, extends far beyond digital assets. Adobe and Microsoft are moving toward a kind of feudalistic system when it comes to their software—like Adobe Creative Studio and Microsoft Office that are available as subscriptions and not purchases.²⁵³ Many

²⁴⁹ See Gregory S. Alexander, *Time and Property in the American Republican Legal Culture*, 66 N.Y.U. L. REV. 273 (1991); William H. Simon, *Social-Republican Property*, 38 UCLA L. REV 1335 (1991).

²⁵⁰ Joseph William Singer, *Property as the Law of Democracy*, 63 DUKE L.J. 1287, 1296 (2014) ("Property rights establish bargaining power that protects individuals from being forced to comply with the will of others; they are a significant part of what makes free markets 'free."").

²⁵¹ SPRANKLING & COLETTA, *supra* note 35, at 313.

²⁵² Id.

²⁵³ Ian Paul, Office 2013 vs. Office 365: Should You Buy or Rent?, PC WORLD (Jan. 29, 2013, 1:55 PM), http://www.pcworld.com/article/2026703/office-365-vs-office-2013-should-you-rent-or-own-.html; Stephen Shankland, Adobe Kills Creative Suite, Goes Subscription-Only, CNET

digital media providers are also encouraging a subscription based system of viewing digital media like Netflix for movies, Spotify for music, and Amazon Kindle Unlimited for books.²⁵⁴ Beyond software and digital media, the trend is even beginning to apply to physical devices. Recently, Apple and cell phone carriers decided to license their physical devices instead of sell them outright.²⁵⁵ Individuals pay an installment fee every month but do not own their phones.²⁵⁶ Rather, they lease the phones like they would expensive automobiles. As society becomes more and more dependent on digital assets and technology, we may lose a right to own digital property in the way we have owned physical property. If legislation does not curb this practice, digital feudalism will be the new property structure of the technological world, and users will all be serfs in the system of ownership.

CONCLUSION

Digital assets are becoming pervasive in everyday life, but the fate of these assets at an account holder's death continues to be undecided. If an account holder establishes a property interest in digital assets sufficient to devise these assets at death, an individual's intent should be controlling and override contrary or silent contractual provisions. This Article has considered the incidents of ownership held in digital assets the right to use, possess, exclude, and transfer—and concluded that digital assets are imbued with enough incidents of ownership to justify a property interest sufficient to devise digital assets at death. This Article has also used the traditional theories of property law, namely labor, utilitarian, and personhood, to support a claim of property interest in digital assets. There is a sufficient theoretical basis to conceptualize digital assets as property interests that should at least be devisable at death. Lastly, this Article has analyzed the implication of the contractual bar on inheritance and argued that by limiting devisability, we allow digital assets to be controlled in a kind of feudalistic system characterized by absolutism, hierarchy, and a concentration of power.

The freedom of contract cannot diminish the protections of property in the digital era. If we do not recognize property interests in

 $⁽May\ 6,\ 2013,\ 11:18\ AM),\ http://www.cnet.com/news/adobe-kills-creative-suite-goes-subscription-only.$

²⁵⁴ Derek Thompson, *The Death of Music Sales*, ATLANTIC (Jan. 25, 2015), http://www.theatlantic.com/business/archive/2015/01/buying-music-is-so-over/384790 (streaming of music is increasing as sales are decreasing).

²⁵⁵ Victor Luckerson, Why Apple Wants to Lease You Your Next iPhone, TIME (Sept. 9, 2015), http://time.com/4028327/apple-iphone-upgrade-program. ²⁵⁶ Id.

digital assets, we will create an entirely new digital world with vestiges of a very old feudalistic system. Many other forms of property will become digital in the future and new forms of property will be created; how the law treats digital asset contracts will lay the foundation for the future. Currently, we are creating a foundation for fewer rights and less control over these assets than we have in our tangible assets. Digital asset contracts are changing the very nature of our property system and reverting to a system of property that our nation and democracy rejected. In order to combat this slide into the murky waters of digital feudalism we must ensure that digital assets are devisable.