

1

## Introduction

## 1.1 NATURAL PROPERTY RIGHTS

In law and political thought, property rights are often associated with natural law and rights. In political theory, John Locke's Second Treatise of Government describes the protection of private property as a government's "great and chief end." Federalist Papers essay number 10 (by James Madison) describes the protection of property as a government's "first object." In law, property became a distinct field thanks to the international law treatises of Hugo Grotius and Samuel von Pufendorf. Those treatises both ground property rights in more fundamental principles of natural law and rights. Many American state constitutions have provisions like the first section of the Constitution of Virginia. That section declares that all men are entitled to "inherent rights," it holds that these rights focus generally on people's "pursuing and obtaining happiness and safety," and it enumerates as one of these rights a right to the "means of acquiring and possessing property." Those "inherent rights" are natural rights, and the references to "happiness" and "safety" link the rights back to traditional principles of natural law.<sup>2</sup>

But do natural rights or natural law give property rights a distinct character? Many scholars assume not. One article describes natural law as "meaningless," as "an empty vessel into which one can pour almost anything." And is it out of vogue to reason about property with natural rights or law? Stuart Banner assumes that "natural law is no longer part of a lawyer's toolkit"; "[t]oday, if a lawyer tries to discuss natural law in court, the judge will look puzzled, and opposing counsel will start planning the victory party."<sup>3</sup>

Locke (1698/1988), II.v.124, p. 350; Hamilton et al. (1787–88/2001), no. 10, p. 43; Grotius (1625/1962), II. ii–iii, pp. 186–219; Pufendorf (1688/1934), bk. VI, chs. iii–vi, pp. 524–585; Va. Const. art. I, § 1. See Buckle (1991), 1–190.

<sup>&</sup>lt;sup>2</sup> See Buckle (1991); Ely (1992/2007); Gordley (2006), 49–158; Helmholz (2015); West (2017), 309–45.

<sup>&</sup>lt;sup>3</sup> Stoebuck (1972), 572–73; Banner (2021), 1.



4 Foundations

In this book, I argue the opposite. Natural law and rights justify property rights on satisfying grounds. They identify considerations that seem relevant when government officials set new policies affecting property. They justify sensible presumptions and exceptions when lawyers apply property doctrines to new cases. And they supply fair criteria for citizens to judge the laws and policies they live under.

## 1.2 TWO TEST CASES

Consider two examples. The first consists of a practice this book calls "eminent domain-supported economic development." Sometimes, cities, counties, or other local governments (here, "municipalities") decide that local neighborhoods are underutilized. To revitalize such neighborhoods, municipalities may condemn privately owned land and transfer title to it to businesses or commercial developers. In the US, when municipalities condemn and transfer private property for economic development, they do so pursuant to authority granted in enabling acts passed by state legislatures. Different enabling acts authorize condemnation-and-transfer policies on different grounds. "Economic development"-enabling statutes authorize such policies on two conditions: The municipality must prepare a comprehensive plan for development, and condemnation and transfer must be necessary to produce the forecast economic benefits.<sup>4</sup>

Eminent domain-supported economic development is controversial. As early as the 1990s, eminent domain abuse was a popular topic in news stories and editorials. But eminent domain abuse now has a poster case, the 2005 US Supreme Court decision *Kelo v. City of New London*. In legal doctrine, the US Supreme Court's opinion suggests strongly that municipal economic development plans should be reviewed deferentially by federal courts. But the development project challenged in *Kelo* also illustrates the strengths and limitations of eminent domain as used in municipal economic development.

The *Kelo* lawsuit was brought to stop efforts by the city of New London, Connecticut, to redevelop a low-to-middle-class residential neighborhood called Fort Trumbull. Fort Trumbull sits on a peninsula jutting out into the Thames River, and neighborhood residents have nice views of the Thames and of Long Island Sound. In the mid-1990s, local New London officials and then-Connecticut Governor John Rowland persuaded Pfizer, Inc., a global pharmaceutical company, to build a new research facility in New London. After redevelopment, Fort Trumbull would have a new retail area and new hotels and commercial office

<sup>&</sup>lt;sup>4</sup> See, for example, Conn. Gen. Stat. § 8–193 (2023). See also 27 Am. Jur. 2d Eminent Domain (1968), § 365.

<sup>&</sup>lt;sup>5</sup> See 545 U.S. 469, 480–83, 488 (2005) (quoting Hawaii Hous. Auth. v. Midkiff, 467 U.S. 229, 242–43 (1984)).

See Kelo, 545 U.S. at 473–75; Benedict (2009), 9–11, 40–54. I coauthored a brief amicus curiae in Kelo on behalf of the Claremont Institute, in support of Kelo and the other petitioners facing



Introduction

5

buildings. New London's Development Corporation selected Corcoran Jennison, a commercial developer based in Boston, to develop the relevant neighborhoods consistent with the development plan. And it is understandable why New London authorities wanted to make over Fort Trumbull. As of 1998, in Fort Trumbull, only 67 of 115 dwelling structures were occupied, and only 12% of residential buildings in the neighborhood were considered in at least average condition.

Even so, shortly after the *Kelo* decision was handed down, it was opposed by 81% and 95% of respondents in two separate surveys. And the more one studies the details of the Fort Trumbull plan, the easier it is to understand respondents' misgivings. New London authorities did not need to build the hotels and other commercial infrastructure right next to the Pfizer facility; other land was available. One Pfizer official explained that his company supported the use of eminent domain because it "wants a nice place to operate. We don't want to be surrounded by tenements." There was no convincing proof that the redevelopment was likely to rejuvenate New London. Another Pfizer official concluded that the site New London was offering Pfizer was small, inaccessible, and too burdened by environmental problems to be a successful pharmaceutical plant.<sup>10</sup>

The Fort Trumbull plan also threatened property rights. The plan forced Susette Kelo to give up a 900-square-foot residence she had bought and improved for herself. She liked her house's waterfront view, and the house symbolized for her the freedom she gained after she divorced her husband. The plan forced Billy Von Winkle, another plaintiff, to sell many lots he had bought and improved and was hoping to resell himself. It forced the Dery family to move. Wilhelmina Dery was in her 80s, she was living with her family in the house she had been born in, and she worried that she would not survive a move that late in life. The plan also condemned the home of two other plaintiffs, Pasquale and Margherita Cristofaro, who had been ousted from another property through eminent domain."

The Fort Trumbull plan was also the product of inside dealing. To get Pfizer to go along with the plan, Connecticut and New London authorities offered the company a 10-year, 80-percent property tax abatement, and they also offered to spend \$100 million to acquire land to make the site attractive. And when New

condemnation and ouster. The Claremont Institute Brief as Amicus Curiae, Kelo v. City of New London, 545 U.S. 469 (2005) (No. 04-108), 2004 WL 2802971.

<sup>&</sup>lt;sup>7</sup> See Kelo, 545 U.S. at 474–76 & n.4; Allen (2014); Benedict (2009), 105–6, 115–18, 215–16.

<sup>8</sup> See Kelo, 545 U.S. at 473; Benedict (2009), 9, 15, 23–24, 47–50; Lefcoe (2010).

On the backlash to Kelo, see Somin (2015), 138 and table 5.1; see also id. at 135–64 for additional background.

<sup>&</sup>lt;sup>10</sup> Benedict (2009), 43–47, 139, 219; see also Condon (2009).

See Kelo v. City of New London, 843 A.2d 500, 510 (Conn. 2004), aff'd, 545 U.S. 469 (2005); Allen (2014); Benedict (2009), 27, 33, 42, 62, 69, 85–86, 101–2, 171.



6 Foundations

London authorities selected Corcoran Jennison to be the developer, they assigned the company a 99-year lease for a dollar a year.<sup>12</sup>

The other test case covers a practice this book calls forced pooling. "Forced pooling" refers to the process by which a government agency – usually, a state energy department or oil and gas commission – consolidates the mineral rights of many right-holders into one single unit. The legal authority to supervise that unit goes to a private energy company. When oil and natural gas are trapped underground in reservoirs, forced pooling helps the energy company take the greatest possible advantage of geothermal pressure. When oil and gas are trapped in rocks ("tight" rocks), they are released by "fracking," a process that breaks rocks up with high-pressure injections of hydraulic fluid. When energy producers frack, forced pooling consolidates mineral rights and heads off trespass suits against fracking.

Under either scenario, forced pooling proceedings begin when one or more mineral rights-holders petition for them.<sup>14</sup> When enough owners petition, the responsible state agency must determine whether forced pooling seems necessary. If the agency does consolidate mineral rights, it may do so over the objections of other owners who do not want oil or gas extracted. After extraction, all rights-holders receive royalties in proportion to their mineral interests.<sup>15</sup>

As the word "forced" suggests, forced pooling condemns mineral rights as eminent domain condemns rights in land. Forced pooling helps states produce oil and gas, and some citizens sincerely believe that governments should not do anything to help stimulate the production of fossil fuels. The members of *Frack Free Colorado*, a grassroots antifracking group, oppose any fracking in order "[t]o protect Coloradans' basic rights to clean water, clean air, a safe home, and a sustainable future." Even when citizens do not oppose energy production on principle, they may still oppose government efforts to pool rights in their backyards. Once rights are pooled, such citizens worry, the energy company responsible for oil and gas extraction may threaten their health, their safety, or the quality of their water or their local environments. For example, in 2017, commissioners for Lee County, North Carolina, took testimony to decide whether to lift a moratorium on energy production that had been instituted in the previous decade. Resident Bobby Riddle wanted the

<sup>&</sup>lt;sup>12</sup> See Kelo, 545 U.S. at 476 n.4; Allen (2014); see also Benedict (2009), 52–58.

<sup>&</sup>lt;sup>13</sup> See "Forced Pooling" (undated). In some usages, what I call in text "forced pooling" covers two distinct regulatory regimes. "Unitization" covers most of what the text calls forced pooling – the compulsory consolidation of mineral rights to take advantage of geothermal pressure or to avoid subsurface trespass complications. "Pooling," by contrast, covers assemblies of tracts of land and subjacent mineral rights large enough to satisfy local spacing requirements. Kramer (2006), 224–32; Kramer and Martin (2020), § 901. Mineral rights-holders can also consolidate rights by voluntary agreement.

<sup>&</sup>lt;sup>14</sup> See, for example, 58 Pa. Stat. & Cons. Stat. § 408 (West 2021).

<sup>15</sup> Tex. Nat. Res. Code. Ann. § 102.017(a) (West 2021). See also Kramer and Martin (2020), §§ 6.01–02.

<sup>&</sup>lt;sup>16</sup> "Frack Free Colorado" (undated).



Introduction

7

moratorium extended; he worried that oil or gas extraction would "rape the land and allow [energy producers] to come in and lower our water table, all we're doing is lowering our water source for the future."<sup>17</sup>

It will take the rest of this book to demonstrate the claims I'll make here.<sup>18</sup> But assume for the moment that natural rights and natural law can guide property law. It should seem troubling for a municipal government to condemn private land and reassign it for economic development. It should not seem as troubling when a state agency forcibly pools mineral rights for energy production. Natural rights and natural law principles support both judgments, and they help express those judgments in reasoned arguments.

To explain those judgments, we can focus on whether the policies under study secure natural rights, or on whether they seem to be just exercises of government power. Start first with the rights. A natural property right is a right to the exclusive use of one or more resources, structured to serve interests that people have in using that resource. In law and practice, however, different property rights confer differing degrees of exclusivity. All property rights are structured to serve interests that people have in using resources. People are entitled to try to survive or to flourish, and people have rights to put their ownable resources to uses that help them survive and flourish. But to say how rights should be structured in relation to particular resources, responsible authorities need to reason practically. For many resources – clothes or personal tools – use requires broad discretion, for users to decide how to use the resources. But other resources have only a few similar uses. For those resources – and here water rights provide an important example – use is facilitated better by assigning to people limited property rights, and by leaving those rights subject to ongoing supervision.

That framework explains why eminent domain-supported economic development seems more troubling than forced pooling. In communities in which land is already owned and being used, people's rights to their land should entitle them to stop others and governments from forcing them to surrender their land. People can put land to a wide range of uses – factories, stores, businesses, residences, private preserves, or assets to improve and "flip." All of those uses are legitimate. When a government protects owners' rights to be left alone on their lots, it empowers them to decide for themselves how to use their lots for their own chosen life goals. That freedom encourages careful and productive management of land. It motivated Billy Von Winkle to put sweat equity into lots he planned to sell later. But that same freedom can also protect people as they carry out many life goals that do not seem

<sup>&</sup>lt;sup>17</sup> Horner (2017). For similar conflicts, see "Forced Pooling Bill Introduced in West Virginia House of Delegates" (2016); Downing (2014).

The law relevant to forced pooling and eminent domain-supported economic development is studied in detail in Chapter 14.

Throughout this book, the phrase "water rights" refers to conventional rights to use water or water flow from rivers or sources of fresh water flowing in fixed courses on the earth's surface.



8 Foundations

very economic. Susette Kelo wanted a lot with a nice view, Wilhelmina Dery wanted to live in the home she grew up in, and the Cristofaros wanted not to be pushed aside repeatedly by New London authorities.

With rights in oil and natural gas, by contrast, it should be easier to restructure conventional rights. Mineral rights seem fairly removed from whatever uses surface owners or occupants are making of the surface. And oil and gas are used best for a few obvious uses – combustion, for heat or for power. To further those uses, oil and gas must be discovered, produced, and distributed commercially. If property rights need to be pooled to encourage that production, then it is just to pool the rights.

Now that we have covered the rights, we can turn to the powers governments claim to exercise when they reorder those rights. To condemn and reassign land or mineral rights justly, the government must be exercising the police power, the power to regulate property. In practice, the condemnation of land and other resources is often associated with the power of eminent domain. Not in the theory introduced in this book. When a government secures natural rights, it may exercise the eminent domain power only if, after condemnation, the property is used for the public in a relatively strict sense. The government satisfies this requirement if it keeps title to the property and uses it on the public's behalf. The requirement may also be satisfied if the property goes to some private party and is then held and used in some manner leaving private citizens with easy access to it. In forced pooling, however, the energy company holds legal title in the mineral rights and any profits from production are distributed to the condemnees. In the Fort Trumbull project, Corcoran Jennison received a private 99-year lease.

For a condemnation of land or mineral rights to be just, then, it must be a just police regulation. The police power covers several different models for laws, and the model relevant here authorizes laws "secur[ing] an average reciprocity of advantage." If a positive law reorders property rights already established in law, it is legitimate only if the reordering seems reasonably likely to serve the interests of most of the affected proprietors better than existing legal rights do. The "advantages" that proprietors get from a genuine reciprocity of advantage regulation are the benefits that accrue when the regulation serves their interests. Well-drawn conveyancing laws satisfy this standard. The extra paperwork and filing requirements required by conveyancing secure sellers and buyers reciprocal advantages in more secure titles. <sup>21</sup>

Two factors help determine whether a government policy secures an average reciprocity of advantage. First, there must be a well-founded need to reorder property rights as the law under consideration does. (There is no obvious way to make title more secure and reliable except to make people follow formalities when they transfer land.) If such a need exists, the reordering must serve the interests of the

<sup>&</sup>lt;sup>20</sup> Pennsylvania Coal Co. v. Mahon, 260 U.S. 393, 415 (1922). See also id. at 422 (Brandeis, J., dissenting); Section 13.5.

<sup>&</sup>lt;sup>21</sup> See Blackstone (1765–69/1979), v. I, p. 134.



Introduction

9

parties bound by the regulation more effectively than those same interests would be served without such restrictions. (For conveyancing laws, there is extra security in title.)

Forced pooling satisfies these two standards. It is necessary, in a relatively strict understanding of "necessary," to condemn and consolidate mineral rights to produce subsurface oil and gas. If the energy company is drilling by conventional methods, it needs all of the mineral rights to take the greatest advantage possible of geothermal pressure. If the company is fracking, fracking pipes usually run two or more miles horizontally underground. It is infeasible for a miles-long horizontal drill arm to snake around the subsurfaces of protesting owners. Either way, forced pooling works to the reciprocal advantage of mineral rights-holders. Pooling increases the amount of oil or gas produced, and rights-holders receive extra royalties in proportion to their rights in the reservoir or play.

Eminent domain does not satisfy those same standards, not when used to condemn privately owned land during local economic development.<sup>22</sup> To begin with, such schemes do not provide ousted owners with any extraordinary compensation that seems to secure them genuine "advantages." When lots are condemned, the owners receive only the fair market values of their rights.

But eminent domain seems troubling for a second reason. Eminent domain is "necessary" to municipal development in the sense of being "convenient" to such development; it is not "necessary" in the sense of being "indispensable." Fort Trumbull, the neighborhood targeted for condemnation and redevelopment in *Kelo*, was home to an Italian Dramatic Club, a local men's club and a go-to spot for local politicians. When members and local politicians complained about the Club being removed, the New London Development Corporation revised its comprehensive plan to keep the Club among all the new commercial construction.<sup>23</sup> The Corporation could have made similar exceptions for the local residential owners who sincerely wanted to stay. And if the Corporation (and Pfizer) had wanted a parcel free of holdovers, they could have acquired one by other means. When the Disney Company built Disneyland in southern California, it acquired the lots it wanted with option contracts and real estate agents who never let on that they were negotiating with Disney.<sup>24</sup>

In short, natural rights and natural law principles help people reason why some forced transfers of resources seem just and others unjust. And the criteria that inform those judgments help explain why rights in the same basic category justify different outcomes in different contexts. One can see as much in seminal cases. One key American constitutional law decision upholds a pooling law on the ground that it "secur[ed] a just distribution, to arise from the enjoyment by [proprietors], of their

<sup>&</sup>lt;sup>22</sup> See Claeys (2004), 919–32.

<sup>&</sup>lt;sup>23</sup> See Benedict (2009), 65–66, 175–76.

<sup>&</sup>lt;sup>24</sup> See Kelly (2006).



10 Foundations

privilege to reduce to possession, and to reach the like end by preventing waste."<sup>25</sup> When this opinion asks whether the challenged pooling law helps "prevent waste," whether it helps mineral rights-holders "reduce to possession" the greatest amounts of oil and gas, and whether it distributes royalties via a "just distribution," it focuses on the factors natural rights make relevant, through the concept of reciprocity of advantage regulation.

So too for eminent domain as used in municipal economic development. The most important precedent for the Supreme Court's ruling in Kelo was the 1954 Court decision in Berman v. Parker. Berman upheld from constitutional and statutory challenges the District of Columbia Renewal Act, which authorized the D.C. government to clear land for redevelopment if it found the target land "obsolescent," "substandard," and "blighted."26 The ruling in Berman modified substantially a district court judgment adverse to D.C. authorities. The district court opinion holds that, when a government asserts power to clear and reassign land not yet actually blighted, it threatens "the basic concept of natural rights and of property as one of those rights." And the opinion expresses forcefully the dangers that arise when it is easy for municipal authorities to use eminent domain to condemn and reassign private land: Well-connected insiders may promote their visions about good community policy by taking the property of less-connected outsiders. That possibility was anticipated by Judge Barrett Prettyman, the author of the district court opinion: "In many circles [old-fashioned uses of property] are considered 'backward and stagnant'. [Yet t]he slow, the old, the small in ambition, the devotee of the outmoded have no less right to property than have the quick, the young, the aggressive, and the modernistic or futuristic."27

## 1.3 ARGUMENT

Those two examples illustrate most of this book's lessons. Here are the main lessons, organized by the parts and chapters in which they will be studied.

This book justifies property rights in relation to a theory of natural law and rights. Part I introduces that theory. Chapter 2 introduces the theory, and it clarifies what I mean by "natural law" and "natural rights." The phrase "natural law" can refer to moralities that ground human obligations in divine revelation, and also to moralities that ground obligations in universalizable (Kantian) propositions about the logical structure of morality. But a third family of natural law theories grounds morality in people's capacities to flourish. Views in this family surface in law and practice occasionally – hence the references to "happiness" in US state constitutions and

<sup>&</sup>lt;sup>25</sup> Marrs v. City of Oxford, 32 F.2d 134, 140 (8th Cir. 1929) (quoting Ohio Oil Co. v. Ind., 177 U.S. 190, 210 (1900)), cert. denied sub nom. Ramsey v. Oxford, 280 U.S. 563 (1929).

<sup>&</sup>lt;sup>26</sup> D.C. Code § 5–701 (1951); see Berman v. Parker, 348 U.S. 26, 28 (1954).

<sup>&</sup>lt;sup>27</sup> Schneider v. District of Columbia, 117 F. Supp. 705, 716, 719 (D.D.C. 1953), modified sub nom. Berman v. Parker, 348 U.S. 26 (1954).



Introduction

other organic documents. Such views surface in philosophical and political theory,<sup>28</sup> not only in work on natural law but also in work on virtue ethics<sup>29</sup> and perfectionism.<sup>30</sup> As Chapter 2 shows, (flourishing-based) natural law supplies people with guidance on how to act in practice, how to choose acts and courses of conduct that seem likely to help them flourish.

As Chapter 2 shows, however, in social life and politics, natural law can focus discourse not on flourishing, nor on duties, but instead on natural rights.<sup>31</sup> Flourishing sets a direct standard for conduct when people reason about ethics, how they should behave in their own lives. But flourishing is an unworkable and even dangerous standard to apply in social morality or politics.<sup>32</sup> Most of the things that we do in our daily lives contribute to flourishing, but only very indirectly and gradually. Oil and gas help us flourish, but only by supplying us with goods we need (heat, tools, and power) to satisfy the basic preconditions for flourishing. To complicate things, activities can help some people flourish but then interfere with other people's efforts to flourish. That is what happens when careful oil and gas production creates nuisances and environmental problems, or when ambitious municipal redevelopment gets rid of low- or middle-class residential homes. To sort out conflicts like these, a community needs some principled way to prioritize different activities and to coordinate the efforts of different people to flourish by different routes.

For these and other reasons, law and politics can advance goals associated with natural law *without* ordering people to flourish in some specific way. Law and politics can focus on two intermediate concepts justified by natural law – interests and natural rights. As used in this book, "interests" refer to stakes that individual people may legitimately and reasonably claim in particular things and activities. Interests mark off different topics for which people may be entitled to rights, and interests justify those rights. Disputes over oil and gas production or municipal redevelopment differ sharply from the issues that arise when people compete with one another in the same trade, when they associate in partnerships, or when one person claims rights to have his person kept out of the activities and projects of someone else. As Chapter 2 shows, that fact justifies reasoning about law and social morality through different interests that people have, and it justifies distinct rights to life, liberty – and property.

When natural law and natural rights guide political and legal reasoning, they do so by supplying foundations and not formulas. Judges, legislators, and regulators

<sup>&</sup>lt;sup>28</sup> See, for example, Finnis (1980/2011); Veatch (1985); Wolfe (2006).

<sup>&</sup>lt;sup>29</sup> See, for example, Crisp and Slote (1997); Hursthouse (1999).

<sup>&</sup>lt;sup>30</sup> See, for example, Couto (2014); Hurka (1993); Rasmussen and Den Uyl (2005).

<sup>&</sup>lt;sup>31</sup> In this book, I use "morality" as a catch-all term to refer to the field of reasoning about normative issues. "Morality" covers three subfields, namely ethics, politics, and social morality. See Section 2.3.

<sup>&</sup>lt;sup>32</sup> Contra Alexander (2018). See Claeys (2009).



12 Foundations

exercise considerable judgment when they develop doctrines and institutions in law. Natural rights and natural law principles give law and policy focus, but they also leave authorities free to exercise judgment. Aristotle frequently analogizes between ethics and architecture, and architecture fairly represents the mix of focus and discretion that natural law and rights supply to property.<sup>33</sup> In philosophical scholarship, "practical reason" marks off the domain in which people apply general principles of morality to practice. Natural property rights supply the foundations with which judges, legislators, and regulators can reason practically about property. Chapter 3 introduces practical reason and the different steps involved in it. Using speed limits and (nonlegal, customary) local rights in street-side parking spaces, Chapter 3 shows how natural rights guide practical reasoning about legal rights.

The concepts introduced in Part I – natural law, natural rights, interests, and practical reason – justify all sorts of natural rights. They justify property rights, and Part II shows how and why.

Chapter 4 introduces the field of property and the interest that organizes it. Property institutes normative relations between people with respect to what this book calls "ownable" resources. Resources are ownable if they are "separable." A resource is separable if it isn't a person or some attribute that belongs to a distinct person – that is, if it seems distinct enough that it should be treated as a thing ownable by anyone and not as an attribute of some specific individual. People have interests in acquiring reasonable shares of separable resources and in using such resources for survival or flourishing. Those interests do not automatically justify property rights. But they do lay the basis for reasoning about those rights.

Chapter 5 justifies natural property rights; it shows how such rights follow from people's interests in acquiring and using resources. People are entitled to assert natural property rights in relation to particular resources if four conditions are satisfied. Each of those conditions identifies an element for a natural property right, and Chapter 5 introduces those elements. Two of those elements describe requirements that people need to satisfy to acquire a natural right in relation to a particular resource – claim communication, and productive use. Claim communication gives other people reasonable notice that someone claims exclusive authority over a resource or some uses of it. Claim communication calls for rules like the rule of capture for gas, or like the many conventions that give people formal title in land. Productive use consists of any purposeful, intelligent activity with a resource to help the user or someone else survive or flourish – combustion for power, use for residential enjoyment, use for commerce, and use for a long list of other possible activities that can help people survive or flourish.

<sup>33</sup> See, for example, Aristotle (c. 350 BCE/2002), bk. VI, ch. iv, p. 105; bk. VII, ch. xi, p. 137. See also Aquinas (1485/2023), I–II, Q. 95, art. 2; Finnis (1980/2011), 28, 284–85; McCall (2018), 38–47.