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A Darwinian theory of institutional evolution two centuries before Darwin?*



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How effective institutions come about and how they change are fundamental questions for economics and social science more generally. We show that these questions were central in the deliberations of lawyers in 17th century England, a critical historical juncture that has motivated important institutional theories. We argue that the lawyers held a conceptualization of institutional development that foreshadowed many elements of Darwinism, more than two centuries before Darwin's great contributions. To this end, we first identify a set of features characteristic of Darwinian evolutionary social-science theories. We then match the lawyers' own words to these features, revealing the many congruities between a Darwinian approach and the lawyers' evolutionary model of institutional construction and change. Finally, we analyze the normative conclusions on institutional development that the lawyers drew from their evolutionary analysis.

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1. Introduction

17th Century England

How effective institutions are created and how institutions change are fundamental questions of modern economics that have attracted much interest especially since Douglass North's contributions (see, e.g., North, 1990). In this paper, we show that these questions were central in the deliberations of lawyers and jurists at the dawn of England's rise to prosperity and democratic development, in the early 17th century. But more importantly, we argue that among these common-law lawyers there was a commitment to a conceptualization of institutional construction and change that foreshadowed many elements of Darwinism, more than two centuries before the publication of *On the Origin of Species*.

We make this argument analytically. First, we identify the core features of a Darwinian theory as conceptualized by modern scholars who have applied evolutionary thinking to social phenomena (Hodgson, 2002). These features are then

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used as criteria to judge to what degree the lawyers' theories match Darwinian concepts. We show that statements about law and legal change characteristic of the 17th century common-law milieu frequently match the modern conceptualizations. Effectively, we use the lawyers' own words to construct their implicit theory of institutional change, showing that this theory has many characteristics of a Darwinian evolutionary model. Our analysis does not rely on our interpretations of what the lawyers said, or the interpretations in secondary sources, but rather builds a coherent argument using more than one hundred passages from the lawyers' own writings.

The view of institutional evolution held by the 17th century English lawyers differs markedly from perspectives prominent in the current literature. A particularly influential set of theories focuses upon the behavior of powerful political actors who are reliably able to establish institutions that serve their own goals (North and Weingast, 1989; Acemoglu and Robinson, 2005, 2012; North et al., 2009). These purposive acts are often prompted by unique historical circumstances, with institutional persistence ensuring a long-lasting aftermath, perhaps for centuries (Nunn, 2009). While the lawyers did acknowledge persistence, their cognitive model of selection between institutional alternatives emphasized bounded rationality and behavioral peculiarities to such an extent that the lawyers' view of the forces shaping institutional change was closer to that of Darwin's evolution than that of forward-looking optimization.

The lawyers' cognitive model resonates better with the current literature that focuses on culture (Guiso et al., 2006; Tabellini, 2008; Nunn, 2012; Bowles and Gintis, 2011) and that emphasizes the simultaneous interaction between culture and institutional development (see, e.g., Alesina and Giuliano, 2015). Our analysis is consistent with those emphases, showing how the lawyers' beliefs about the workings of the world influenced the development of English law as the lawyers used (and enhanced) the unique powers provided to them by the English institutional framework. But our methodology differs from the predominant approach in the literature on institutions and culture in that we provide an in-depth historical case-study, detailing intimate features of the mental constructs used by the lawyers as they influenced institutional evolution.

The cognitive model held by 17th century English lawyers gives rise to a perspective on institutional evolution that has normative implications for present-day debates about institutional reform (see, e.g., Murrell, 1992; Sachs 1993; Roland, 2000; Djankov et al., 2003; Rodrik 2006; Acemoglu and Robinson 2012). Indeed, we end the paper with the hypothesis that the 17th century English lawyers could have much to teach us about the formation of policies conducive to modern economic and political development, and that what they can teach derives directly from the methodology underlying their analysis. That there are important lessons is not surprising given that the lawyers provided an early precursor to "the most profound and powerful idea to have been conceived in the last two centuries" (Mayr, 2001: v).

Although we find a high degree of coherence in the lawyers' views, we do not claim that their theories are fully Darwinian. As Hodgson (1993: 159–161) and Mayr (1985) point out, there exist no genuinely Darwinian evolutionary theories before Darwin. Similarly, Bentley Glass argues that many of Darwin's alleged forerunners in the history of science "were hardly evolutionists; others, in their own eyes, not evolutionists at all" (Glass et al., 1959: ii). But we do argue that the lawyers' rather complete theory of institutional construction entailed many elements that were remarkably Darwinian.

We also do not claim that we are the first to recognize that notions of evolution and ideas about selection had been applied to social science topics before Darwin. Hodgson and Knudsen (2010: 31) recognize the early development of some 'broadly defined' Darwinian evolutionary thinking, but places its beginning in the 18th century, as does Ratnapala (2001).² Indeed, Darwin himself acknowledged his debt to Thomas Malthus. Malthus, however, emphasized the consequences of competition for "the regulation of population of *numbers*, not the frequency characteristics found in a population" (Sober 1984: 16) and did not see competition as "an instrument for improvement and change" (Sober 1984: 16). In our interpretation, the lawyers' views contained many more elements of an inchoate Darwinism than did Malthus' observations, in particular the possibility of competitive selection producing improvement.

There are also antecedents to our emphasis on the contributions of the 17th century English lawyers. Hayek (1960: 56), for example, refers to the "tradition rooted in the jurisprudence of the common law", mentioning Matthew Hale, one of the legal thinkers on whom we rely, but placing the development of a theory in the 18th century, in such thinkers as Hume, Smith, and Burke.³ There has also been a general recognition in the historical literature that the 17th century lawyers loosely anticipated elements of later thinking, the most well-known work being by Pocock (1960, 1967). He recognized the Burkean, but not the Darwinian, character of the lawyers' views and chose to highlight the lawyers' theories of the antiquity of English law and the view that the law gained credibility simply from its antiquity. Indeed when Burke (1729–1797) drew on the ideas of the 17th century lawyers, he magnified the claim for the benefits of antiquity, placing at the center of Burkean conservatism the requirement of adhering to the tradition of an enduring community (Young 1994: 648–653; Pocock, 1960,

¹ Note that the historical juncture on which we focus—17th century England—provides important evidence used to motivate these theories. Given the immensely important role at that time of the common-law theory of institutional change, our observations contain the potential to reinterpret that evidence. While this is an important implication of our paper, we do not pursue it here.

² Ratnapala (2001) states that "the principle of accumulation of design was discovered in relation to social evolution" in the 18th century.

³ In addition, as Hodgson (2003) suggests, Hayek might have underestimated the originality of Darwin's ideas and never fully and coherently articulated the crucial distinction between ontogenetic and phylogenetic conceptions of institutional change. Our paper also provides evidence relevant to the following statement of Hayek, which never seems to have been fully pursued in the literature "[T]here can be little doubt that it was from the theories of social evolution ["general atmosphere of an evolutionary philosophy which governed thought on social matters in the nineteenth century"] that Darwin and his contemporaries derived the suggestion for their theories..." (Hayek 1960: 59, 433) Again, while this could be an implication of our paper, we do not pursue it here.

1967: 36). By placing so much emphasis on tradition and on a nation as a timeless organic entity, Burke downplayed those elements of the lawyers' theories that foreshadowed Darwinian selection between competing entities. In contrast, as we show below, the lawyers fashioned arguments that used their evolutionary methodology to discuss when following tradition was productive (or unproductive) and when change in legal institutions should be promoted.

Thus, while some readers will be familiar with the general point made in Hayek, Pocock, and others—that there is a resemblance between traditions in common-law thought and elements of an evolutionary approach—our analysis departs from these antecedents in four important ways. First, we provide a full exposition of the ideas present in the common-law tradition when it was first articulated in detail, in the 17th century. Second, we analyze those ideas in the context of a set of criteria characterizing a Darwinian theory. Third, we emphasize the degree to which a coherent evolutionary theory containing many elements of Darwinism existed as early as the first half of the 17th century. Fourth, we view this theory as one of institutional evolution, containing both positive analysis that predicts continuing change and normative reasoning on how that change can be best accomplished.⁴

The paper is structured as follows. Section 2 provides some very brief facts on 17th century England, necessary to understand context. Section 3 identifies the core elements of Darwinian theory as used by current scholars when applying evolutionary thinking to social phenomena. Section 4, the heart of the paper, provides an exposition of the lawyers' theories. Drawing on the framework of Section 3, Section 4 demonstrates that these theories match many of the criteria that characterize a Darwinian theory. The final section summarizes the key normative lessons that the lawyers formulated on institutional development and change.

2. Historical background

We provide a brief background to English history, the legal profession, and the lawyer-scholars who contributed most to the development of the ideas discussed here. The purpose is to provide context for those unfamiliar with the most basic facts: this section offers little to those familiar with the pertinent English history.

The reign of Elizabeth I (1558–1693) stood in contrast to the previous 150 years, which had seen civil wars, monarchies usurped, a contentious protestant reformation, and its temporary, but violent, reversal. Even in that previous era of great instability, England had a relatively legalistic culture. Littleton's treatise on land law (1854, original circa 1480) has influence today and Fortescue's (1825) contemporaneous overview of law still contributes to constitutional debates. Lawyers were therefore well placed to increase their role when the long reign of Elizabeth saw stirrings of economic progress. Agrarian change and fiscal demands gave impetus to revisions in property law, while increasing domestic and foreign commerce led to more sophisticated mercantile law. The venerable common-law courts grasped new functions. Competition between courts spurred legal innovation, for example in contract law. Elizabeth's reign saw lawyers rise to a new level of prominence in politics and society.

Not surprisingly, the number of lawyers grew substantially in the latter half of the 16th century. The legal profession solidified itself around the nation's 'third university', London's Inns of Court. These were a set of residences that provided space for both students and practicing lawyers who maintained offices there. The Inns became the locus of all the internal interactions of the profession, where the teaching of law was systematized and the recording of cases routinized. Situated between London's commercial district and the nation's political center, the physical location of the Inns was of no small importance in increasing the lawyers' influence. Given the central role of law in English culture, the Inns became an important way-station in the education of members of the upper classes, many of whom gained intimate knowledge of the law while having no intention of eventually practicing it.

In 1603 Elizabeth died without issue and the Tudors were replaced by the Stuarts. Oversimplifying one of the most studied periods in world history, we might characterize the next 85 years as a struggle between a dynasty that had less sympathy for Protestantism, the common law, and traditional English political rights, and less enmity for the French, than did its subjects, especially those represented in Parliament. The arguments of lawyers were at the fulcrum of that struggle. This struggle resulted in two civil wars, two kings replaced, eleven years without a monarchy, an eventual truce under a Dutch monarch, and the survival—indeed the strengthening—of the common law. This survival occurred in part because the prevailing culture held that legitimacy in economic and political life was attained through the use of common law institutions, among which the lawyers would have placed both the monarchy and Parliament.

⁴ A separate line of research in law and economics has focused on the evolution of common law and its efficiency (see, e.g., Posner, 1972; Priest, 1977; Rubin, 1977; Cooter et al., 1979; Cooter and Kornhauser, 1980; Gennaioli and Shleifer, 2007; Miceli, 2009; Garoupa and Gómez Ligüerre, 2012). This research, however, does not examine the evolution of law through the explicit lens of a Darwinian theory (see Section 3) and it also focuses more narrowly on litigation as the primary vehicle of legal change.

⁵ We use the term 'common law' to indicate the whole of English law. Strictly speaking, common law was only one part of English law, some courts using other bodies of law. The most important of these other courts was Chancery, which used equity, a system of rules to cover situations where either common law was not dispositive or it produced results that were regarded as too harsh. We do not make separate comments about equity because Chancery increasingly came to be guided by common-law trained lawyers in Elizabeth's time, meaning that its approach to rules, precedents, and sources of law reflected the methodology we describe in this paper. For the relevant history, see Holdsworth (1924, Chapter IV, part II), who marks the 1530's as the time when common lawyers became dominant in the administration of Chancery.

Although we use statements from a variety of lawyer-scholars, five loom large. Edward Coke (1552–1634) is arguably history's greatest lawyer-scholar. He rose to and fell from the pinnacle of politics while simultaneously writing compendious reports of legal cases that provide both theories of law and fundamental precedents used to this day. Coke particularly emphasized the shaping of law by the judiciary, a process he called (legal) reason. This stands in contrast to his contemporary, John Davies (1569–1626), who highlighted the role of popular acceptance of customs, which eventually became solidified in law. Perhaps this was a reflection of Davies' role as Attorney General for Ireland, where local customs came in conflict with transplanted English law and judges had to rule on their acceptability. Francis Bacon (1561–1626) was Coke's rival in politics and in law. Although today revered as the father of modern empirical science, he was more celebrated in his day as a lawyer-scholar. His empirical method, produced in his later years, has more than a passing resemblance to the prevailing philosophy of legal development.

Matthew Hale (1609–1676) was the leader of the profession's next generation, respected for his piety, his self-effacement, his judgment, and his compendious knowledge. He rose to the highest levels of the law under both Cromwell, who ended the monarchy, and Charles II, who restored it. As head of a law reform commission under Cromwell, Hale had ample opportunity to deliberate on institutional change, which he later analyzed by building on the lessons of his predecessors, synthesizing their earlier deliberations. John Selden (1584–1654) bridged the two generations, studying in the Inns, where Coke and Bacon were dominant figures, and mentoring Hale. Selden was probably the most learned man of his generation in history and philosophy, and most of all in the history of English and European law. In contrast to the four others mentioned, he was more interested in scholarship than in practicing politics and the law.

The methodology of the lawyers was not confined to law. Law was so central in English life that the lawyers' views spread generally. Ben Jonson dedicated one of his plays to the Inns of Court. Law affected science via Bacon's method, which spurred the formation of the Royal Society, an institution that played a pivotal role for centuries (Wheeler, 1983; Sargent, 1989). Philosophy, historical study, and political theorizing absorbed the lawyers' approach (Cromartie, 1999; Pocock, 1967; Shapiro, 2000; Berman, 1994). The lawyers' methodology that explained institutional development was the model of way the world worked for the educated 17th century Englishman.

3. Elements of an evolutionary theory of institutions

To develop criteria to judge whether a set of ideas might be called Darwinian, this section identifies the core elements of a Darwinian theory (Hodgson, 2002) as conceptualized by scholars who have applied evolutionary thinking to social phenomena (e.g., Nelson and Winter, 1982; Boyd and Richerson, 1985; Hull, 1988; Mokyr, 1998; Nelson, 1995; Hodgson, 1998; Ziman, 2000; Ostrom, 2000; Samuelson, 2002; Bowles et al., 2003; Hodgson and Knudsen, 2004, 2010; Dopfer, 2006; Aldrich et al., 2008; Bisin and Verdier, 2001; Bowles and Gintis, 2011; Lustick, 2011; Okasha and Binmore, 2012; Wilson and Gowdy, 2013). As evolutionary theorists have emphasized (Hodgson, 2002, 1993: 168; Aldrich et al., 2008; Lustick, 2011), not all evolutionary notions are directly transferrable between the natural and social sciences. Therefore, to illustrate the core concepts within a specific setting pertinent to our analysis, we suggest how legal processes might be viewed in evolutionary terms.

The essence of a Darwinian selection process lies in the competition between the *interactors* of the system and the differential success rates of the different interactors while undergoing competitive selection, which in turn causes the differential perpetuation of the relevant *replicators* (Hull 1988: 409; Hodgson and Knudsen, 2010; Aldrich et al., 2008). The replicators (see, e.g., Aldrich et al., 2008; Hodgson and Knudsen, 2010) are entities that "pass on [their] structure largely intact in successive replications" (Hull 1988: 408). In the context of legal evolution, the replicators are particular legal rules with their clearly defined associated properties, for example, a negligence rule and the strictness of the due standard of care associated with that rule. Interactors are vehicles that host the replicators, directly interact with the environment as a cohesive whole, and cause differential replication (see, e.g., Hull, 1988; Hodgson and Knudsen, 2010). The selection *of* the interactors then results in the selection *for* legal rules (replicators) (Sober, 1984).⁶

The interactors are nested at and act at multiple hierarchical levels (see, e.g., Hodgson and Knudsen, 2010: Ch. 7; 2004). At their lowest level in legal processes, the interactors are the specific statutes, legal cases, and social customs which are potentially applicable to specific legal domains and could be invoked in social interchanges that potentially come under the purview of the law. The selection process at this level might occur outside the formal legal system, as, for example, when a transaction problem is solved by invoking a specific social custom. Selection at this level could be perceived as 'artificial' (as opposed to 'natural'), as is the case when judges purposefully choose a specific case or statute to articulate what the law is (see, e.g., Commons, 1924, 1934). However, as evolutionary theorists have emphasized (see, e.g., Hodgson, 2004), artificial selection hinges on natural selection of higher-level interactors (in this case, of justices). Hence, "natural selection governs the whole" (Hodgson, 2003: 562) and artificial selection is, in this sense, merely a special case of natural selection.

At the intermediate level, the interactors are individuals (e.g. jurists, politicians) and groups (e.g. political factions) that hold contrasting positions on the issues at stake (see, e.g., Hull, 1988) and battle for positions of influence in courts or in the political arena. Then, for example, adjudication by a specific judge leads to differential replication of the rules preferred by this judge; or lobbying, elections or a revolution foster differential replication of the rules embodied in the laws preferred

⁶ Although Darwin did not explicitly refer to the replicator-interactor distinction, this distinction is prefigured in some of his writings.

by the winning side. Finally, at the highest level, the interactors are legal systems as a whole and it is competition between different legal systems (see, e.g., Ogus, 1999) that causes differential replication of legal rules. Therefore, at the intermediate and higher levels in particular, the selection *for* legal rules occurs in a way that is analogous to the selection *for* genes at the level of different biosocial groups (see, e.g., Sober, 1984; Hodgson, 1993; Ch. 12; Hodgson and Knudsen, 2010).

The environment within which interaction and replication take place is in turn determined and shaped by political and adjudicatory structures, as well as a variety of economic and other agents who engage each other through multiple political, legal, and social domains regulated by legal rules. Ultimately, in the context of any single domain of engagement, one and only one particular rule from a class of legal rules will apply, that is, be selected for as a result of the differential success of the many interactors of the system.

The three building-blocks of any Darwinian process are thus variation, selection, and replication with retention, which in turn produce *population-level changes* (Campbell, 1965; Dennett, 1995; Glenn and Madden, 1995; Mayr, 2001; Aldrich et al., 2008; Lustick, 2011). Variation occurs in the legal rules that are embodied in different interactors and arises via adoption of new customary practices, statutes, transplantation, judicial decisions, or from the generalization of legal concepts that have previously been applied to a different domain. Then, there is competition between interactors within each of the multiple hierarchical levels of interactors discussed above. This competition, which is vitally affected by the characteristics of the environment, indirectly causes the selection for legal rules (the replicators) whereby an anterior distribution of the use of a set of legal rules is transformed into a posterior distribution. These changes in the distribution of the use of legal rules across the different domains of interaction are the population changes that lie at the heart of a Darwinian approach (see, e.g., Sober, 1984; Hodgson and Knudsen, 2010). At the same time, the transformation of the anterior distribution of the use of a set of legal rules into a posterior distribution provides the first and foremost instance of replication and retention.

Replication and retention also take place when social customs, statutes, influential case reports, or other interactors penetrate domains in which they were not previously relevant. This occurs either when new relevant domains arise or when existing domains are invaded by successful legal conceptualizations from other domains; for example, the adoption of the negligence regime in contract law has been contemplated as a result of the success of the negligence standard in torts (see, e.g., Posner, 2009).

This dynamic process working on the distributions of the uses of legal rules produces the type of macro-level change (Lustick, 2011) that is characteristic of evolutionary processes. A new legal rule might first be applicable in only a narrow domain (whether domains are defined geographically, by economic sector or by activity or function, etc.). A 'successful' legal rule will, through the differential proliferation of customs, statutes, cited cases, and other political and legal practices, spread to other areas cumulatively, perhaps altering the nature of the whole legal system, plausibly without any explicit decision that such a legal rule should do so. Coherent, system-wide institutional development then results from shifts in the distributions of the use of different legal rules. The character of this development intimately depends on the nature of the environmental context.

Institutional change is therefore a process of selection for legal rules that results from many collectively unguided interactions. Individuals whose actions collectively contribute to the differential proliferation of the interactors of the system are boundedly rational in that they rely on routines and habits (the analogs of genes and memes in biological and cultural theory) to address new and unfamiliar problems posed by continuously changing socio-economic conditions in a world of Knightian uncertainty (see, e.g., Nelson and Winter, 2002; Hodgson, 2002: 262; Ostrom, 2000: 145). Accordingly, the defining feature of evolutionary theories of institution-building is emphasis on ongoing experimentation and trial-and-error learning (see, e.g., Samuelson, 2002; Mokyr, 1998: 128). In this process, it is understood that change-generating decisions are initially made with highly incomplete knowledge of outcomes, yet also with awareness that appropriate adjustments will become clear ex post (Nelson, 1995; Mokyr, 1998: 122; Nelson and Winter, 2002). Institutional solutions that solve specific problems may thus emerge without being the result of anyone's direct intention (Lustick, 2011).

An evolutionary view of the world thereby rejects the notion of far-sighted, hyper-rational optimizing behavior as an explanation for how observed institutional solutions came about (Nelson and Winter, 1982; Nelson, 1995; Samuelson, 2002). The application of such optimization, which in turn underpins efficiency analyses, is viewed as problematic in a setting of profound uncertainty and limited rationality where even the range of possibilities is not well defined (Nelson, 1995). Consequently, in an evolutionary approach, different institutional solutions cannot be compared using notions of global optimality and efficiency. Instead, the competing institutional possibilities vary in their ability to successfully address a particular socio-economic problem, which in turn affects their 'fitness' (see, e.g., Nelson, 1995). The selected, replicated, and retained institutional variations then carry connotations of efficiency only "relative to the given environment", and one that is "tolerable rather than optimal" (Aldrich et al., 2008: 585). Furthermore, once certain institutional variations differentially survive, the adjustment costs due to uncertain marginal benefits and inherent institutional complementarities may be substantial. This kind of reasoning concerning institution-building implies path-dependence and, typically—though not always (see, e.g., Gould, 2002; Lustick, 2011)—gradual change.

An evolutionary conceptualization of a society thus entails a concern with "long-term and progressive change" (Nelson and Winter, 1982: 10) as opposed to steady-state equilibrium and comparative statics. A corollary of this view of evolving change is the existence of conceptualizations distinctive of evolutionary theory such as speciation, convergent evolution, exaptation, and niche construction. Much like speciation when geographic isolation gives rise to diversity in the natural world (Mayr, 2001), institutional diversity is an expected phenomenon whereby different institutional outcomes emerge in different localities or domains (Aldrich et al., 2008). Akin to independent evolution of similar traits in species of different

lineages (e.g., flying in birds and bats), convergent institutional evolution takes place when different institutional systems emerge across historically unrelated societies but perform similar functions (Hayek, 1976: 40). Analogous to shifts in the function of a trait in the course of biological evolution (e.g., feathers initially useful in temperature regulation later facilitate flying), ex post institutional adaptiveness can arise for reasons unrelated to initial design (see, e.g., Lustick, 2011; Miceli, 2012). And just as organisms can modify their environment by niche construction, thereby influencing the evolution of their own and other species (see, e.g., Odling-Smee, 2009), specific institutional solutions alter the society in which they apply, thereby shaping further institutional evolution.

4. The evolutionary conception of institutional change in 17th century England

No single author set out a theory of legal development in 17th century England, stating its assumptions explicitly and logically deriving their implications (Cromartie, 2005: xxvii). That was not the style of the early 17th century, and certainly not that of the lawyers, who were most of all professional men aiming to advance the cause of their clients, their profession, and their commonwealth. But in their professional activities they needed to deliberate on what the law was, how it might be, and, this meant for them, how it came to be. Their deliberations are replete with theoretical statements. It is from these statements that we construct a systematic account of a theory that captures the lawyers' implicit model of their world.

In Section 3 we identified three sets of features characteristic of Darwinian theories of institutions—assumptions on agents' decision—making powers relative to the complexity of their world, the three core elements of Darwinian processes, and the endogenous phenomena characteristic of those processes. In the following subsections, we draw on the framework of Section 3 to organize the description of how the legal practitioner–scholars in 17th century England thought of institutions and approached problems of institutional creation and change.

Before departing on that analysis, we make four notes to help the reader interpret what follows. First, many of the quotes appearing in the main body of the text have been lightly edited to render them more readable in the 21 st century. Nevertheless, for those readers interested in the full context of the quotes, we have reproduced them in full in the original language in the footnotes.⁸

Second, in the following we use the lawyers' statements of alleged historical facts only to make conclusions about their theory of how the world worked. The veracity of their views on what actually happened in England's history is left to others. Indeed, many past historical works have pointed out many transgressions in the lawyers' accounts of the past.

Third, in presenting a single synthesis, we do not minimize the differences between various lawyer-scholars. Rather, we emphasize that these differences were primarily in confronting the details of implementation of a common, inchoate, methodology. An example of such differences was on the type of selection mechanism that was most important in shaping the law, with Coke and Davies holding two very different positions (Cromartie, 2005: xxx). As we elaborate more fully in Section 4.2, while Coke emphasized the role of lawyers in selection, Davies saw the determination of law in the selection of customs in the more general society. Note however, that these two positions are compatible at a methodological level. Both authors hint at the presence of a Darwinian-type selection process working through time. Thus, in focusing on methodology, we are able to show fundamental consistencies between the different lawyers despite the substantial differences between them in how the methodology played out when applied to the facts. 11

Fourth, we concentrate only on what is distinctive and innovative in common-law thought in the early and mid 17th century. But this should not be interpreted as implying that the scholar-lawyers were uninfluenced by the main trends of European thought. Knowledge of the classics was assumed in the Inns, as was fluency in Latin. Extensive quotations in Latin were used as rhetorical flourishes because readers would immediately recognize their historical significance. Similarly, the lawyers were thoroughly familiar with the natural law tradition and contemporaneous developments in it. They were willing to accept that all law must ultimately derive from natural law (see, e.g., O'Sullivan, 1945). The lawyers' disagreement with the natural law tradition was therefore not in questioning natural-law principles but rather in doubting whether those principles could be ascertained by other than a common-law process. This disagreement was central, for example,

⁷ Hobbes was a notable exception in stating an articulated theory of the state, but as is well known, his theory of the law was not that of the lawyers.

⁸ In editing, we often rely on the Oxford English Dictionary (OED). The footnotes also contain extra, sometimes long, quotes that are not referenced in the text but included to show the basis of our judgments.

⁹ Coke (1628) viewed the sources of law in the following way: "Ley temporal Which consisteth of three parts, viz. First, on the Common Law, expressed in our Bookes of Law and iudicial Records. Secondly, on Statutes contained in Acts and Records of parliament. And thirdly, On Customes grounded upon Reason, and used time out mind; and the Construction and determination of these belong to the Judges of the Realm." For Davies "...by frequent iteration and repetition of the act, a custome is formed, and being used time out of mind, it obtains the force of a law. ... For the Common Lawe of England is nothing else but the common Custome of the Realme" (Davies, 1628, 1762).

¹⁰ Indeed, as in so many other matters, later in the 17th century Hale absorbed and synthesized the positions of his predecessors: "[Y]et this claim of [canon law]...grew so burdensome and intolerable, that it was from time to time qualified and abridged by the civil power, sometimes by acts of parliament taking it away in some cases, sometimes by the interpretation and construction of the judges, and sometimes by the contrary usage of the kingdom; for ecclesiastical canons...had not their authority from their own strength and obligation, but from the usages and customs of the kingdom that admitted them" (Hale 1847, sec. II: 324).

¹¹ Cromartie (2005: xxx) views the lawyers as occupying positions on a continuum, where at the one end there were those who emphasized the customary aspect and treated law as something subject to popular approval and at the other end there were those who emphasized legal process in the hands of trained judges, Coke's (Coke 1628: 97b) "artificial perfection of reason gotten by long studie observation and experience".

in the debate between Hobbes (2005), an opponent of the lawyers who was closer to the natural law tradition, and Hale (1921). According to Hobbes, general reasoning was all that was necessary to derive good law, while Hale emphasized evolutionary process combining custom and the specialized human capital acquired by judges. What was distinctive and new in the cognitive model of the 17th century English lawyers was this early effort at thinking through the need for and the consequences of an evolutionary process (Berman, 1994; Postema, 2002, 2003). It is on this innovative element that we wholly focus.

4.1. Boundedly constrained agents in a complex, uncertain world

The emphasis on "the weakness of man's reason" (Selden, 1726; 1891)¹² and "the defects of his understanding and his will" (Hale, 1688: 60)¹³ were natural for a time subscribing to "[t]he assumption of the mediocrity of man's position in the universe" (Lovejoy, 1961: 203), an assumption that was inherited from elements of Greek philosophy of which the lawyers were fond. ^{14,15} When there are cognitive constraints, the consideration of new laws, for example, will not receive the due "attendance upon and attention unto a business of this nature" if the "occasions of state are many great or important" (Hale, 1787: 271–272). ¹⁶ This cognitive constraint was fundamental to the lawyers' theorizing. Hobbes—no friend of the lawyers but understanding their position well—had the lawyer in his Dialogue echoing Coke: "[1]f all the reason that is dispersed into so many several heads, were united into one, yet could he not make such a law as the law of England is" (Hobbes, 2005: 9). ¹⁷ This constraint bit even in understanding existing law: "There are many things especially in law and government . . . reasonable to be approved, though the reason of the party doth not presently or immediately and distinctly see its reasonableness." (Hale, 1921: 291). ^{18,19}

The cognitive constraints meant "that a creature so limited and so near to the other animals, in kind if not in kinship, must necessarily be incapable of attaining any very high level of political wisdom", as Lovejoy (1961: 203) captured the thinking of the time. This became apparent in the construction of new laws: "...every entire new model of laws ...seems specious [i.e. superficially attractive] in the theory, yet when they come to be put in practice, they are found extremely defective" (Hale, 1668).²⁰ This view of the imperfection of man in relation to the tasks he faced was commonplace for the age, inherited from Aristotle and surviving at least as far as the late-century revolutionaries. Sydney (1751: 136) advised that "it ought to be considered that the wisdom of man is imperfect, and unable to foresee the effects that may proceed from an infinite

¹² Selden (1726, 1891); Selden, 1726: "[T]he divers opinions of interpreters proceeding from the weakness of man's reason, and the several conveniences of divers states, have made those limitations [i.e. amendments], which the law of nature have suffered, very different."

¹³ Hale, 1688: 40 "Upon what hath been said, may appear, wherein lies *the immediate Cause of Man's miscarriage* to his Supream End: It lies in the Defects of his Understanding and his Will."

¹⁴ See Doddridge (1631: 236–237) for an explicit reference to the "the great chain of being": "GOD...hath furnished the world with unspeakable variety...linking and conjoying one thing to another, as by a chaine".

¹⁵ Selden (1726, 1891): "[T]he divers opinions of interpreters proceeding from the weakness of man's reason, and the several conveniences of divers states, have made those limitations [i.e. amendments], which the law of nature have suffered, very different." Hale (1688: 60): "Upon what hath been said, may appear, wherein lies the immediate Cause of Man's miscarriage to his Supream End: It lies in the Defects of his Understanding and his Will."

¹⁶ Hale (1787: 271–272): "Touching the time or season for such a business [of legal reform], it must be observed, that it is not every parliament that is fit for such a business. When either the times are turbulent or busy, or when other occasions of state are many great or important, that is not a season for such an undertaking; for it is not possible among such hurries of business, there can be that attendance upon and attention unto a business of this nature, as in truth it requires."

¹⁷ Hobbes (2005: 9): "This Legal Reason is summa ratio and therefore if all the Reason that is dispersed into so many several heads were united into one, yet could he not make such a Law as the Law of England is, because by so many successions of Ages it hath been fined and refined by an infinite number of Grave and Learned Men." See for example Coke (1628: 97b): "And this is another strong argument in law, Nihil quod est contra rationem est licitum [Nothing contrary to reason is lawful]; for reason is the life of the law, nay the common law itselfe is nothing else but reason; which is to be understood of an artificial perfection of reason, gotten by long study, observation, and experience, and not of every man's naturall reason; for. Nemo nascitur artifex [No one is born master of an art]. This legall reason est summa ratio [is the perfection of reason]. And therefore if all the reason that is dispersed into so many severall heads, were united into one, yet could he not make such a law as the law in England is because by many successions of ages it hath beene fined and refined by an infinite number of grave and learned men, and by long experience growne to such a perfection, for the government of this realme, as the old rule may be justly verified of it, Neminem oportet esse sapientiorem legibus [No man ought to be wiser than the law]: no man out of his own private reason ought to be wiser than the law, which is the perfection of reason." Or see Coke's report of Calvin's case (Coke 1777, Report 7: 4a): "[F]or we are but of yesterday, (and therefore had need of the wisdom of those that were before us) and had been ignorant (if we had not received light and knowledge from our forefathers) and our days upon the earth are but as a shadow, in respect of the old ancient days and times past, wherein the laws have been by the wisdom of the most excellent men, in many successions of ages, by long and continual experience, (the trial of right and truth) fined and refined, which no one man, (being of so short a time) alb

¹⁸ Hobbes' views relevant to bounded rationality are interesting here. He, above all, was the person whose theory most needed the rational, far-sighted, non-information-constrained agents present in the purest forms of neoclassical economics. But he simply sidestepped the points emphasized by the lawyers, his theories implicitly assuming that such agents exist. See Hobbes (2005) and chapters 8, 18, and 26 of Leviathan.

¹⁹ Hale (1921: 291): "There are many thinges especially in Laws and Governm^{ts} y^t imediately, Remotely and Consequentially are reasonable to he approoved, though the reason of the party doth not presently or imediately & distinctly See its reasonableness."

²⁰ Hale (1668): "The Common-Laws ot England are settled and known; every entire new modell of Laws labours under two great difficulties and inconveniencies viz First, that though they feem specious in the Theory, yet when they come to be put in practice, they are found extremely defective either too strait or too loose, or too narrow, or too wide, and new occurrences, that neither were or well could be at first in prospect, discover themfelves, that either disjoynt or disorder the Fabrick".

variety of accidents, which according to emergencies, necessarily require new constitutions, to prevent or cure the mischiefs arising from them, or to advance a good that at the first was not thought on".²¹

How did the lawyers view the constraint as being loosened in practice? Foreshadowing Locke, the lawyers emphasized experience as the source of knowledge: "[N]othing can come to our understandings demonstratively but either by our senses, or by discourse and reasons deduced from such things as so come to our senses" (Hale, 1688: 40).²² And this applied no more so than for the law: "In things that have their original much by institution, men cannot easily or ordinarily by rational deduction find them out, but only by instruction and education" (Hale, 1668),²³ for "the body of laws that concern the Common Justice applicable to a great Kingdom is vast and comprehensive, and must meet with various emergencies and therefore requires much time and much experience, as well as much wisdom and prudence" (Hale, 1668).²⁴

Hence, experience makes the law (Davies, 1628: 255; Coke, 1628: 60).²⁵ Wisdom is imparted to the law by a long process of experience since "our days upon the earth are but as a shadow, in respect of the old ancient days and times past, wherein the laws have been by the wisdom of the most excellent men, in many successions of ages, by long and continual experience, (the trial of right and truth) fined and refined, which no one man, (being of so short a time) albeit he had in his head the wisdom of all the men in the world, in any one age could ever have effected or attained unto" (Coke, 1777, Report 7: 3b–4a).²⁶ The theorizing faculties of humans were no match for this process: "[T]ime and long experience is much more subtile and judicious, than all the wisest and accutest wits in the world co-existing can be" (Hale, 1787: 254).²⁷

Limits on the attainment and processing of knowledge were everywhere, but were particularly acute for those creating institutions: "[O]f all kind of subjects where about ye reasoning faculty is conversant, there is none so great a difficulty for the faculty of reason to guide itself and come to any steadiness as that of laws, for the regulation and ordering of civil societies" (Hale, 1921: 288).²⁸ The world is so complicated and ultimately laws must reflect many different circumstances: "[E]very moral action is or may be diversified from another by circumstances which are of so great an influence into the true nature and determination of moral actions that they very frequently specifically difference actions that are materially the same. . . and these circumstances are so various and their influx into moral actions so different and so difficult to be discerned, or adequately estimated, that the making of laws touching them is very difficult" (Hale, 1921: 291).²⁹ And with the different circumstances comes the complexity of laws: "[T]he body of laws, that concern the common justice applicable

²¹ Sydney (1751: 136): "Tho' I mention these things [historical examples of the fall of government], it is not with a design of blaming them, for some of them deserve it not; and it ought to be considered that the wisdom of man is imperfect, and unable to foresee the effects that may proceed from an infinite variety of accidents, which according to emergencies, necessarily require new constitutions, to prevent or cure the mischiefs arising from them, or to advance a good that at the first was not thought on: And as the noblest work in which the wit of man can be exercised, were (if it could be done) to constitute a government that should last forever, the next to that is to suit laws to present exigencies, and so much as is in the power of man to foresee: And he that should resolve to persist obstinately in the way he first entered upon, or to blame those who go out of that in which their fathers had walked, when they find it necessary, does as far as in him lies, render the worst of errors perpetual. Changes therefore are unavoidable, and the wit of man can go no farther than to institute such, as in relation to the forces, manners, nature, religion or interests of a people and their neighbours, are suitable and adequate to what is seen, or apprehended to be seen: and he who would oblige all nations at all times to take the same course, would prove as foolish as a physician who should apply the same medicine to all distempers".

²² Hale (1688: 40): "The Soul of Man is considerable: In its absolute Essence we must conclude it to be an Immaterial Immortal Substance. This though it be a certain truth, yet it is impossible naturally to demonstrate it: the reason is, because nothing can come to our Understandings demonstratively but either by our Senses, or by Discourse and Reasons deduced from such things as so come to our Senses."

²³ Hale (1668): "In things that have their original by institution, men cannot easily or ordinarily by rational deduction find them out, but only by instruction and education, and yet those things are of as great necessity and use to mandkind as other matters more obviously deducible by Argumentation".

²⁴ Hale (1668): "But the body of Laws, that concern the Common Justice applicable to a great Kingdom is vast and comprehensive, consists of infinite particulars, and must meet with various Emergencies, and therefore requires much time and much experience, as well as much wisdome and prudence successively to discover defects and inconveniences and to apply apt supplements and remedies for them. and such are the Common-Laws of England, namely the productions of much Wisdome, Time and Experience."

²⁵ Davies (1628: 255): "But, as it is said of every Art or Science which is brought to perfection Per varios usus Artem experientia fecit [Through different usages, practice brought skill]: so may it properly be said of our Law, Per varios usus Legem experientia fecit [Through different usages, experience created the law]. Long experience, and many trialls of what was best for the common good, did make the Common Law." Coke (1628: 60): "But he [i.e. Littleton] setteth not down his own opinion, but rather to the contrarie, as hereafter in this chapter appeareth. But now magistra rerum experientia [Experience is the mistress of things], hath made this cleare and without question, that the Lord cannot".

²⁶ Coke reporting Calvin's case (Coke 1777, Report 7: 3b-4a): "[F]or we are but of yesterday, (and therefore had need of the wisdom of those that were before us) and had been ignorant (if we had not received light and knowledge from our forefathers) and our days upon the earth are but as a shadow, in respect of the old ancient days and times past, wherein the laws have been by the wisdom of the most excellent men, in many successions of ages, by long and continual experience, (the trial of right and truth) fined and refined, which no one man, (being of so short a time) albeit he had in his head the wisdom of all the men in the world, in any one age could ever have effected or attained unto."

²⁷ Hale (1787: 254): "It is most certain, that time and long experience is much more subtile and judicious, than all the wisest and accutest wits in the world co-existing can be. It discovers such varieties of emergencies and cases, that no man could ever otherwise have imagined. It discovers such inconveniences in things, that no man would otherwise have imagined. And on the other side, in every thing that is new, or at least in most things especially relating to the lawes, there are thousands of new occurrences and entanglements and coincidencies and complications, that would not possibly have atfirst foreseen."

²⁸ Hale (1921: 288): "Of all Kind of Subjects where about y^e reasoning Facultie is conversant, there is none So greate a difficulty for the faculty of reason to guide it Selfe and come to any Steddiness as that of Laws, for the regulation and Ordering of Civil Societies and for the measurement of right and wrong, when it comes to particulars."

²⁹ (Hale 1921: 291): "[E]very Morall Action is or may be diversified from another by Circumstances which are of soe greate an Influence into the true nature and determination of Morall Actions that they very frequently specifically difference Actions that are materially the Same, and give auch Allayes & abatem^{ts} or advances and improvem^{ts} to them that Scarce two Morall Actions in the world arc every way commensurate. And these Circumstances are Soe various and their Influx into Morall Actions so different and Soe difficult to be discerned, or adequately estimated, that the make- ing of Laws toucheing them is very difficult."

to a great kingdom is vast and comprehensive, consists of infinite particulars, and must meet with various emergencies" (Hale, 1668).³⁰

Those "emergencies" reflect a world of profound Knightian uncertainty with new and unfamiliar problems posed by continuously changing socio-economic conditions. One should "expect ['unstable and troublesome times'] before they come; the very state of the world is uncertain and unstable, and for the most part stormy and troublesome. If there be some intervals of tranquility and sedateness, they are commonly attended with longer periods of unquietness and trouble; and the greatest impressions are then made by them, when they surprise us, and come unexpected" (Hale, 1676: 368).³¹ In the law "daily new questions came in debate whereof before had been no resolution, and wherein many times the least variety of circumstances does alter the law" (Doddridge, 1631: 241).³² Change is inevitable for "succeeding ages...bring always some alteration" (Selden, 1726: 1888)³³ with such alterations reflecting both political and economic developments: "[P]arliaments have taken off, or abridged many of the titles about which it was conversant: usage and disusage has antiquated others, and the various accesses and alterations in point of commerce and dealing, has rendered some proceedings...to be no more useful" (Hale, 1668).³⁴

Thus, the passage of time requires change but change is risky.³⁵ Bacon, no foe of innovation, nevertheless emphasized its risks: "As the births of living creatures at first are ill-shapen, so are all innovations, which are the births of time" (Bacon, 1859a: 32).³⁶ The "making, interpreting, and applying laws...requires a very large prospect of all the most considerable emergencies that may happen not only in that which is intended to be remedied, but in those other accidental, consequential or collateral things that may emerge upon the remedy propounded" (Hale, 1921: 290).^{37,38}

This world of bounded rationality and profound uncertainty is exactly the one in which behavioral economics would be at home. Indeed, the lawyers would have been labeled as early proponents of this approach had they had *homo economicus* as a foil. Bacon reportedly viewed statutes as often made "upon the spur of the times" and he viewed customs as arising through an initial bout "either of simplicity or of ignorance" (Bacon, n.d.: 11–12).³⁹ And yet these mutations could become law, indeed profound law, as pronounced by Chief Judge Popham in 1597: "Although it be error, yet the long use and multitude of precedents must draw it into law, for *communis error facit jus* [i.e. common error makes law]" (quoted in Baker, 1971: 222). Nearly one hundred years later, the judges enunciated the very same principle: "[T]he court answered, that all the justices of peace in England did so, and therefore, though they have not authority to do it in strictness of law, yet *communis error facit jus*" (1 Lord Raymond 42; English Reports 91: 925).⁴⁰

³⁰ Hale (1668): "[T]he body of laws, that concern the Common Justice applicable to a great Kingdome is vast and comprehensive, and must meet with various emergencie and therefore requires much time and much experience, as well as much wisdome and prudence successively to discover defects and inconveniences, and to apply apt supplements and remedies for them".

³¹ Hale (1676: 368): The title of the section is "A GOOD METHOD TO ENTERTAIN Unstable and Troublesome TIMES." And then the opening part of the section is: "The first expedient is to Expect them before they come; the very state of the World is Uncertain and Unstable, and for the most part Stormy and Troublesome. If there be some intervals of Tranquillity and Sedateness, they are commonly attended with longer periods of unquietness and trouble; and the greatest impressions are then made by them, when they surprize us, and come unexpected. When the mind is prepared for them by a kind of Anticipation, it abates the edge, and keenness, and sharpness of them. By this means a man, in a great measure, knows the worst of them before he feels them, which renders the very incumbence of them not so smart and troublesome to sense, as otherwise they would be."

³² Doddridge (1631: 241): "I say that forasmuch as dayly new questions came in debate whereof before had bin no resolution, and wherein many times the least variety of circumslances doth alter the Law; therefore our Ancestors thought it more convenient, to be rather governed by an unwritten law, not left in any other monument, than m the mind of man".

³³ See also Hale (1668): "[E]xperience shews us that new and unthought of Emergencies often happen". Selden (1726, 1888): "As succeeding ages, so new nations (coming in by a conqueft, although mixed with a title, as of the Norman conqueror, is to be affirmed) bring always fome alteration."

³⁴ Hale (1668): "[T]he mutations that have been in this kind, hath not been so much in the Law, as in the Subject Matter of it; the great Wisdome of Parliaments have taken off, or abridged many of the Titles about which it was conversant: Usage and disusage hath antiquated others, and the various accesses and alterations in point of Commerce and dealing, hath rendred some proceedings...to be no more useful."

³⁵ Cromartie (2009: 212) notes "the Aristotelian point (then generally accepted) that systems of rules invariably break down when faced with the complexity of human situations".

³⁶ Bacon (1859a: 32): "As the births of living creatures at first are ill-shapen, so are all innovations, which are the births of time; yet notwithstanding, as those that first bring honour into their family ae commonly more worthy than most that succeed, so the first precedent (if it be good) is seldom attained by imitation; for ill to man's nature as it stands perverted, hath a natural motion strongest in continuance; but good as a forced motion, strongest at first."

³⁷ While time necessitates the accommodating, but imperfect, innovations, time also provides the experience that facilitates the productive reshaping of innovations. "It is most certain, that time and long experience is much more subtile and judicious, than all the wisest and accutest wits in the world co-existing can be. It discovers such varieties of emergencies and cases, that no man could ever otherwise have imagined. It discovers such inconveniences in things, that no man would otherwise have imagined. And on the other side, in every thing that is new, or at least in most things especially relating to the lawes, there are thousands of new occurrences and entanglements and coincidencies and complications, that would not possibly have atfirst foreseen" Hale (1787: 254).

³⁸ Hale (1921: 290). Note that the ellipses in the quoted text are in the original, corresponding to text that is indecipherable in the handwritten manuscript. "And this. . the Difficultie of makeing, interpreting and applying Laws because 1. Itt requires a very large prospect of all the most, considerable emergencies that may happen not only in that wch is intended to be remedyed, but in those other accidentall, Consequentiall or Collaterall thinges that may Emerge uppon the Remedy propounded. 2dly a greate and Experienced Judgemt to weigh and Consider whether the Convenience of the Law propounded may considerably preponderate the inconvenience that it will occasion. 3dly a greate Judgemt and Skill So to apply the remedy that it may. . with the least inconvenience that may be."

³⁹ Foster (1767: 299) described a piece of legislation as but one of many "of those Acts which, to borrow an Expression from Lord Bacon, was made upon the Spur of the Times". Bacon (n.d.: 11–12): "The Customs of the Realm are properly such things as through much, often, and long usage either of simplicity or of ignorance getting once an entry, are entered and hardened by succession, and after be defended as firm and stable laws".

⁴⁰ 1 Lord Raymond 42; English Reports 91: 925. "They [i.e. the plaintiff's counsel] took exception to the replication, that the justices of peace out of sessions could not make an order for an express sum for the maintenance of a poor man, but they agreed that they might sign a rate made by the parishioners. But

Behavioral peculiarities were particularly clear in the sphere of reform, where bounded rationality really bit: some "humours in men" generate "a conceit of a possibility of framing such laws and constitutions, as might be faultless, and exquisitely accommodate to the concerns of the whole community and of every member of it" (Hale, 1787: 256–257).⁴¹ This was most dangerous because intelligence was often accompanied by less useful traits: "[S]eldom is seen such excellency of quick capacity in any one person unmated with the blemish of ranging lightness and instability: That the more fertile is the soil, the more prone it is to bear and bring forth...noisome weeds; ...for quick wits...are apt to take, unapt to keep, soon hot, soon cold, more apt to enter speedily, than to pierce far, like edges of sharp tools, soon [blunted]" Doddridge (1631: 9).⁴² Moreover, the conceit of complete information could lead to a desire for change for its own sake: "As the nature of man generally is affected with novelty, so there are some persons and dispositions that are wonderfully fond of it...The very same itch of novelty and innovation, that carries some dispositions to novelty in garbs and gestures, or to new fashions in clothes, carries such when they happen to be in place to innovations and new fashions in laws; a certain restlessness and nauseousness in what they have, and a giddy humour after somewhat which is new" (Hale, 1787: 256–257).⁴³

But not all of society was moved by the simple 'itch of novelty'. There was also the opposite problem: "By long use and custom men, especially [those that are] aged and have been long educated in the profession and practice of the law, contract a kind of superstitious veneration of it beyond what is just and reasonable" (Hale, 1787: 264).⁴⁴ And this too is dangerous because "a forward retention of custom is as turbulent a thing as an innovation; and they that reverence too much old times, are but a scorn to the new" (Bacon, 1859a: 32).⁴⁵

4.2. Process: variation, selection, and replication with retention

Naturally, the lawyer-scholars did not talk about an 'evolutionary process'. Indeed the modern usage of 'process' only surfaced in the 17th century, and then only for natural phenomena. But since social processes were at the heart of the lawyers' approach, there was a 17th century synonym: *time*. At mid-century, one thing that Hale and Hobbes could agree on was that time provided a process, the former stating that the law is "the production of much wisdom, time and experience" (Hale, 1688) and the latter arguing that "time, and industry, produce every day new knowledge" (Hobbes, 1651: 176). 49

Variation, which in turn provides scope for selection, was to be found in many places. Bacon (n.d.: 11–12, 318) saw variations in legal rules as arising through "simplicity or of ignorance", leading to a "diversity of customs for the guiding

to this the Court answered, that all the justices of peace in England did so, and therefore, though they have not authority to do it in strictness of law, yet communis error facit jus."

⁴¹ Hale (1787: 256–257): "I shall now examine, what are those humours in men, that commonly breed this disease and instability in men in relation to the change of lawes. ... A third ground of precipitate and inconsiderate innovation in lawes, is the want of a due consideration of the true state of nature of all human affairs, especially in that of lawes and government, viz. a conceit of a possibility of framing such laws and constitutions, as might be faultless, and exquisitely accommodate to the concerns of the whole community and of every member of it. And hence if there once occur any inconvenience in a law, presently away with it, and a new frame or model must be excogitated and introduced, and then all will be well." See also Hale (1787: 262) "an over-weaning esteem and valuation, that a man many times hath of some pretty new expedient, that his own fancy or the fancy of others hath suggested for the reformation of something. . .amiss in the law."

⁴² Doddridge (1631: 9): "[S]eldome is seene such excellency of quick capacity in any one person unmated with the blemish of ranging lightnesse and instabilitie: That the more fertile is the soil, the more prone it is to beare and bring forth (without painful manurance) unprofitable, and sometime most noysome weeds; that as waxe is apt to receive whatsover impression, so is it apt easily againe to loose it, and to be new framed into whatsoever fashion; where on the contrary part the form which is engraven in Marble is as hardly worne out as it was with much labour imprinted; for quicke wits (saith one) are apt to take, unapt to keepe, soone hot, soone cold, more apt to enter speedily, than to pierce farr, like edges of sharpe tooles, soone turned."

⁴³ Hale (1787: 256–257): "As the nature of man generally is affected with novelty, soe there are some persons and dispositions that are wonderfully fond of it, and rather than want it will have it even in those things which are most oridinarily perniciously hurt by it. Such are the form of government and the ancient munipal lawes. The veryy same itch of novelty and innovation, that carries some dispositions to novelty in garbs and gestures, or to new fashions in cloathes, carries such when they happen to be in place to innovations and new fashions in lawes; a certain restlessness and nauseounsess in what they have, and a giddy humour after somewhat which is new, and possibly upon no other account but because it is new, or possibly upon some over expectations of the benefit of such change, theough they have no full nor perfect notion what is to be introduced in the place of what they nauseate."

⁴⁴ Hale (1787: 264): "Touching the other extream, the over tenacious holding of lawes, notwithstanding apparent necessity for and safety in change;...1. By long use and cuftom men, especially that are aged and have been long educated in the profession and practice of the law, contract a kind of superstitituions veneration of it beyond what is just and reasonable."

⁴⁵ Bacon (1859a: 32): "It is true, that what is settled by custom, though it be not good, yet at least it is fit; and those things which have long gone together, are, as It were, confederate within themselves; whereas new things piece not so well; but, though they help hy their utility, yet they trouble by their inconformity: besides, they are like strangers, more admired, and less favoured. All this is true if time stood still; which, contrariwise, moveth so round, that a forward retention of custom is as turbulent a thing as an innovation; and they that reverence too much old limes, are but a scorn to the new."

⁴⁶ References to 'process' in connection with social phenomena appeared only in the late 19th century.

⁴⁷ The OED cites Thomas More using the word 'time' in reference to a social process in 1529 ("tyme alwaye tryeth owte the trouth").

⁴⁸ Hale (1668): "But the body of Laws, that concern the Common Justice applicable to a great Kingdom is vast and comprehensive, consists of infinite particulars, and must meet with various Emergencies, and therefore requires much time and much experience, as well as much wisdome and prudence successively to discover defects and inconveniences and to apply apt supplements and remedies for them. and such are the Common-Laws of England, namely the productions of much Wisdome, Time and Experience."

⁴⁹ Hobbes (1651: 176): "Time, and Industry, produce every day new knowledge. And as the art of well building, is derived from Principles of Reason, observed by industrious men, that had long studied the nature of materials, and the divers effects of figure, and proportion, long after mankind began (though poorly) to build: So, long time after men have begun to constitute Common-wealths, imperfect, and apt to relapse into disorder, there may, Principles of Reason be found out, by industrious meditation, to make their constitution (excepting by external violence) everlasting."

of property and private rights" and eventually "firm and stable laws".⁵⁰ In his report on Slade's case (1602), which made it much easier to sue for a debt arising from a breach of contract, Coke cited several cases where decisions endorsed seemingly anomalous past legal practices that were inconsistent with the reasoning of the judges ruling on the cases.⁵¹ For Hale and Selden, variation in legal rules was an inevitable consequence of bounded rationality and profound uncertainty. While Hale (1921: 288) emphasized that "in relation to laws for a community...we shall rarely find a common consent or agreement between men though of great reason",⁵² Selden (1726: 1891) noted the "diverse opinions of interpreters proceeding from the weakness of man's reason".⁵³

The succession of invaders that the island had experienced brought many mutations. "[The laws of England] are as mixed as our language, compounded of British, Roman, Saxon, Danish, Norman customs" (Bacon, 1859b: 235)⁵⁴ because "[the Britons] imitated their conquerors, and...were not backward in affecting those laws, for which the languages and rhetoric were most useful" (Selden, 1726: 1889).⁵⁵ But foreign law provided alternatives other than through war and invasion. Hale (1713, sec. VI, X) viewed the similarity of the legal rules of England and Scotland (and England and Normandy) as arising through multiple processes: "...the vicinity of the kingdoms of England and Scotland and the consequence thereof, viz. translations of persons and families, intercourse of trade and commerce, and possessions obtained by the natives of each kingdom in the other might be one means for communicating our laws to them." ⁵⁶

Canon and civil law also provided input into common law. Canon law's place in the system was materially affected by the political role of the clergy (Selden, 1618: 489).⁵⁷ Doddridge (1631: 161) saw canon law providing ideas because many scholars of the common law also studied canon law.⁵⁸ Selden (1726: 1331) suggested a general process whereby lawyers in countries previously subject to the Roman Empire looked to Roman law for guidance in filling gaps in their own law, even if this law now had no official standing: "[Roman civil law] is used and applied commonly to argument when any of their customs or statutes...come in question."⁵⁹

Notably for the general argument of this paper, while the 17th century legal literature was replete with comments about sources of variation in legal rules, there is an absence of any statement that new rules arise from design, that is, the application of the superior intelligence and innovativeness of individuals: "Rarely do changes in kingdoms happen due to proposals and preparations for the improvement of the commonwealth. Scarcely can one recall either the name or the work of a framer of

⁵⁰ Bacon (n.d.: 11–12): "The Customs of the Realm are properly such things as through much, often, and long usage either of simplicity or of ignorance getting once an entry, are entered and hardened by succession, and after be defended as firm and stable laws." Bacon (n.d.: 318): "For we see in any one kingdom, which is most at unity in itself, there is diversity of customs for the guiding of property and private rights: in veste varietas sit, scissura non sit [Let there be variety in the garment, but let there be no division]."

⁵¹ Coke (1777, Report 4: 93b): "In a writ of error brought by John Paston, to reverse an outlawry against him, he did not surmise in the writ at whose suit he was outlawed, and all the Justices said it was a strange writ, and no certainty supposed thereby; for by the writ it did not appear whether he was outlawed at the suit of the party or at the King's suit, or in what suit, or for what thing, and it might be that he was outlawed for felony, debt, trespass, account or fine to the King, but when the court was informed that the ancient form was such, then they changed their opinion and awarded the writ good, and resolved, that common course makes a law, altho' now as it was there said, perhaps reason willeth the contrary; but there the Justices said, we cannot change the law now, for that would be inconvenient, and therewith agrees Long 5. E. 4.1. where it is said, that the course of a court makes a Law."

⁵² Hale (1921: 288–289): "In Moralls and Especially with relation to Lawes for a Comunitie, tho the Comon Notion of Just and fitt aro comon to all men of reason, yett when Persons come to particular application of those Comon Notions to particular Instances and occasions wee shall rarely finde a Comon Consent or agreem^t between men tho' of greate reason, and that reason Improved by greate Study and Learning, wittness the greate disagreem^t between Plato and Aristotle Men of greate reason in the frameing of their Laws and Comonwoalth, the great difference in most of the States and Kingdomes in ye world in their Laws administrations and measures of right and wrong, when they come to particulars."

⁵³ Selden (1726, 1891): "[T]he divers opinions of interpreters proceeding from the weakness of man's reason, and the several conveniences of divers states, have made those limitations [i.e. amendments], which the law of nature have suffered, very different."

⁵⁴ Bacon (1859b: 235): "Now for the laws of England, if I shall speak my opinion of them without partiality either to my profession or country, for the matter and nature of them, I hold them wise, just, and moderate laws; they give to God, they give to Casar, they give to the subject, what appertnineth. It is true they are as mixt is our language, compounded of British, Roman, Saxon, Danish, Norman customs: and surely as our language is thereby so much the richer. so our laws are likewise by that mixture the more complete."

⁵⁵ Selden (1726: 1889): "Neither needed Tacitus to have mentioned their [i.e. the Britons] affecting the laws of Rome, when they were fubject to them as a conquered people. And no doubt is, but they that imitated their conquerors, and neighbour colonies in the rest, were not backward in affecting those laws, for which the languages and rhetorick were most useful."

⁵⁶ Hale (1713, sec. X) also saw England as adopting foreign law: "[T]he Use of the Neighbouring Country [Normandy] might introduce the same Usage here", leading to profound changes in the law of inheritance.

⁵⁷ Selden (1618: 489): "Therefore it was not without reason on their side at such time as they saw the Power of Rome, that is, the authoritie of Decretals and of the Canons grew most dreadfull to Prince and subject, that they should urge this on to a continuing practice, and that with execution of the reigning Censures of the Church. Hence have the Canons, in this point, hitherto here continued, and have been and are binding Ecclesiastique Lawes, saving wherein the later expresse Laws of the Kingdome crosse them. And thus out of the qualitie of the time, with regard to the practiced insolencie of the Pope and his Clergie in putting their Canons and Decretals in execution, that received generall practice of Parochiall payment (neere almost according to the Canons) and other such alterations, that suddenly varied from former use and from the libertie of the Lay subject, must have its originall".

⁵⁸ Doddridge (1631: 161): "Yea many times when as no Ground or Rule is expressed in our law, but that we may only collect Cases concurrent upon some Conformity of Reason: We shall find in the Civill Lawes a proposition or rule which shall most aptly and most fitly expresse the same Reason in such shortnesse of speech, as nothing shall seem more sufficient in that respect. And unto the which Propositions such as are or may be framed by us in the French, cannot in excellency be worthily compared. As touching the Canon Law, Forasmuch as the studies both of the same and of the Civill Law, are in sort conjoyned by the professors of both, what may be faid of the one, in this respect, may be verified of the other."

⁵⁹ Selden (1726: 1330–1331): "This is plain to every one, that observes the divers customs and ordinances of the states subject to the empire. Indeed in all of them, I think, the reason of it brought into method, is used and applied commonly to argument, when any of their customs or statutes...come in question, because the practisers studied it in the universities, and had then their degress given them."

laws" (Bacon, 1987: 278).⁶⁰ For Hale (1787: 254) laws are not the result of "this or that council or senate, but they are the production of the various experiences and application of...time, which...successively apply new remedies".⁶¹ This is not surprising given the universal assumption of the weakness of man's reasoning, emphasized above.

The lawyers identified many mechanisms that resulted in the selection for legal rules. Of course, the lawyers did not refer to the fundamental concepts of 'interactors' and 'replicators', which is hardly surprising since the distinctive roles of these two phenomena are only now becoming clear in Darwinian theory (see, e.g., Hull, 1988; Hodgson and Knudsen, 2010). Nevertheless, the lawyers' cognitive model clearly included the notion that institutional evolution takes place as a result of the selection of a set of entities that today we would call legal interactors—from specific social customs, legal cases, and statutes at the lowest level, to jurists, political groups, and even legal systems as a whole at the intermediate and highest levels (see Section 3). To be sure, different lawyers emphasized different selection mechanisms, with some lawyers articulating the nature of the selection mechanisms more explicitly than others. Yet, in the general form of the arguments presented and in the way that they used the differing specifics, the lawyers nonetheless presented a surprisingly consistent set of positive arguments on the ways through which the differential replication of legal rules (replicators) was believed to take place.

This claim on the consistency of methodology is best exhibited by comparing the views on the mechanisms of selection of Coke and Davies, who are often cast as taking contrasting positions. Coke (1777, Report 7: 4a) was the most ardent promoter of the view that selection for legal rules occurs as a result of judicial selection of important cases and statutes, in a process "wherein the laws have been by the wisdom of the most excellent men, in many successions of ages, by long and continual experience, (the trial of right and truth) fined and refined". 62,63 In contrast, Davies (1762: 87) emphasized that the selection for legal rules resulted from the absorption of productive popular custom into law: "For where the people find any act to be good and beneficial, and apt and agreeable to their nature and disposition, they use and practice it from time to time, and so by frequent iteration and repetition of the act, a custom is formed, and being used time out of mind, it obtains the force of a law". 64

Thus, Coke and Davies held opposing views concerning which are the most important mechanisms that result in the selection of the lowest-level interactors. ⁶⁵ However, their distinct positions are compatible at a methodological level: both Coke and Davies clearly indicate the presence of a selection process working through time. ⁶⁶ Indeed, there is no logical reason why both their selection processes could not be operating at the same time, even resulting in selection for the same legal rules.

In fact, Davies also thought judges played a role in the selection of customs since he was willing to cite a set of criteria that were used in that selection mechanism. Davies (1762: 87) emphasizes antiquity, continuance, reason (a logic that often included efficiency arguments), certainty, clarity, a reasonable inception (e.g. not imposed for one person's benefit), and

⁶⁰ Bacon (1987: 278): "Aphorism 7. Rarely do changes in kingdoms happen due to proposals and preparations for the improvement of the commonwealth. Scarcely can one recall either the name or the work of a framer of laws. Truly founders of cities and states have need of these to stabilize their civil governments, but the name of the author of the laws gets buried under the name of the founder. Once commonwealths are established, the amendment of the laws piecemeal attends the ills that demand treatment."

⁶¹ Hale (1787: 254): "Now a law that hath abidden the test of time, hath met with most of these varieties and complications; and experience hath in all that process of time discovered these complications and emergencies, and so has applied suitable remedies and cures for these various emergencies. So that in truth antient lawes, especially, that have a common concern, are not the issues of the prudence of this or that council or senate, but they are the production of the various experiences and applications of the wisest thing in the inferior world; to wit, time, which as it discovers day after day new inconveniencies, so it doth successively apply new remedies: and indeed it is a kind of aggregation of the discoveries results and applications of ages and events".

⁶² Coke reporting on Calvin's case (Coke 1777, Report 7: 4a): "[F]or we are but of yesterday, (and therefore had need of the wisdom of those that were before us) and had been ignorant (if we had not received light and knowledge from our forefathers) and our days upon the earth are but as a shadow, in respect of the old ancient days and times past, wherein the laws have been by the wisdom of the most excellent men, in many successions of ages, by long and continual experience, (the trial of right and truth) fined and refined, which no one man, (being of so short a time) albeit he had in his head the wisdom of all the men in the world, in any one age could ever have effected or attained unto."

⁶³ Coke (1628) viewed the sources of law in the following way: "Ley temporal Which consisteth of three parts, viz. First, on the Common Law, expressed in our Bookes of Law and iudicial Records. Secondly, on Statutes contained in Acts and Records of parliament. And thirdly, On Customes grounded upon Reason, and used time out mind; and the Construction and determination of these belong to the Judges of the Realm." For Davies "...by frequent iteration and repetition of the act, a custome is formed, and being used time out of mind, it obtains the force of a law.... For the Common Lawe of England is nothing else but the common Custome of the Realme" (Davies, 1628, 1762).

⁶⁴ Davies (1762: 87): "And as to the first point touching the custom, it was first said, that a custom, in the intendment of law, is such an usage as hath obtain'd the force of a law, and is in truth a binding law to such particular place, persons, or things, as it concerns; and such custom cannot be established by the king's grant, 49 Ed. 3. 3. a. nor. by act of parliament, but it is *jus non scriptum*, and made by the people only of such place, where the custom runs. For where the people find any act to be good and beneficial, and apt and agreeable to their nature and disposition, they use and practice it from time to time, and so by frequent iteration and repetition of the act, a custome is formed, and being used time out of mind, it obtains the force of a law."

⁶⁵ Cromartie (2005: xxx) views lawyers as occupying positions on a continuum, where at the one end there were those who emphasized the customary aspect and treated law as something subject to popular approval and at the other end there were those who emphasized legal process in the hands of trained judges, Coke's (Coke 1628: 97b) "artificial perfection of reason gotten by long studie observation and experience".

⁶⁶ Indeed, as in so many other matters, later in the 17th century Hale absorbed and synthesized the positions of his predecessors: "[Y]et this claim of [canon law]...grew so burdensome and intolerable, that it was from time to time qualified and abridged by the civil power, sometimes by acts of parliament taking it away in some cases, sometimes by the interpretation and construction of the judges, and sometimes by the contrary usage of the kingdom; for ecclesiastical canons...had not their authority from their own strength and obligation, but from the usages and customs of the kingdom that admitted them" (Hale 1847, sec. II: 324).

uninterrupted time out of mind.⁶⁷ These were consistent with the views of Coke (1764: 61–63) who suggested the criteria of equal access to the custom, good consideration (quid pro quo), obligation, certainty, and a general benefit.^{68,69} In a milieu in which theoretical writing about social mechanisms mainly occurred through asides in works addressing more practical affairs, one could hardly expect the lists to be identical, but it is easy to see their broad consistency.

Thus, among the lawyers there was the widespread conviction that through adjudication, there would be selection of methodologies by judges that would in turn influence the selection of lower-level interactors. These higher level criteria used in adjudication were also subject to evolutionary processes resulting in "more or less clearly, diverse rules of reason...which (confirmed by judgment, learning, and much experience, and rightly and well applied) are so many stars and shining lights to direct our course in the arguing of any case" (Finch, 1627: 5). Such procedures were not documented explicitly, but were understood by the judges and lawyers who were part of the community centered on the Inns of Court: "[D]oes [the legal profession] not register and keep in memory the best antiquities of our nation?" (Davies, 1628: 278). Thus the legal profession could be viewed as one of the most important interactors of the system: when there was a struggle over which organization would be the final arbiter of legal decisions, selection of the legal profession would have profound effects on the selection of lower-level interactors (cases, statutes, etc.), which in turn would have effects on the selection for specific rules. In fact, this is a large part of the overall story of institutional development in the English 17th century, and of its relationship to political struggle.

The lawyers were thus keenly aware that at the highest level of politics there was competition between the monarchy and themselves over who would be most influential in selecting statutes, cases, etc. They understood that competition between rulers and political factions (the higher level interactors), either in the politico-economic arena or via warfare, culminates in selection for specific legal rules. In this spirit, Cowel's law dictionary (1727, entry on 'Common Law') summarizes the process of legal evolution as one where a whole succession of invaders (higher-level interactors) had introduced their own sets of laws, but the final one, William the Conqueror, "upon due consideration of all those laws and customs...abrogated some and established others; to which he added some of his country laws". This was an updating of the early approach of Fortescue (1825: 51), which many 17th century lawyers followed, whereby a succession of rulers had "lorded...over us" but "England has nevertheless been constantly governed by the same customs, as it is at present: which if they were not above all exception good, no doubt but some or other of those kings, from a principle of justice, in point of reason, or moved by inclination, would have made some alteration or quite abolished them, especially the Romans, who governed all the rest of the world in a manner by their own laws". Thus, even Fortescue's tale of happy stability contains the germ of a story of Darwinian selection whereby the struggle between higher-level interactors (rulers) and the selection of them results in the selection for specific legal rules.

Not surprisingly, monarchs were cast as being less pure in their objectives than the legal profession. As in modern political economy models, monarchs were viewed as being propelled by a mixture of motives, reflecting the variety in Fortescue's (1825: 51) "from a principle of justice, in point of reason, or moved by inclination". Selden (1726: 1887) saw self-serving motives ('inclination') creeping into decisions, arguing that William needed his own laws because he was illegitimate and

⁶⁷ Davies (1762: 87): "Secondly, it was said, that such cuftom ought to have four inseparable qualities. 1. It ought to have a reasonable commencement. 2. It ought to be certain and not ambiguous. 3. It ought to have an uninterrupted continuance time out of mind 4. It ought to be submitted to the prerogative of the king, and not exalted above it."

⁶⁸ Bacon (n.d.: 123) stated that customs should be ancient, not popular or vulgar, admitted and quiet, and not litigious, which was interestingly a set of criteria that focused most on the process that generated the custom, not the features of the custom itself. "This usage or custom is fortified by four notable circumstances: first, that it is ancient, and not late, or recent; secondly, it is authorised, and not popular, or vulgar; thirdly, that it hath been admitted and quiet, and not litigious, or interrupted; and fourthly, when it was brought in question, which was but once, it hath been affirmed judicio controverso[in a contested case]".

⁶⁹ Coke (1764: 61–63): "[L]et us in few words learne the way how to examine the validity of a Custome:...1. Customes and Prescriptions ought to be reasonable...2. Customes and Prescriptions ought to be according to common right...3. They ought to be upon good consideration...4. They ought to be compulsary...5. They ought to be certaine...6. They ought to be beneficiall to them that alledge the prescription".

⁷⁰ Finch (1627: 5): "And hereupon are grounded more or lesse cleerely, divers rules of reason, that everie where goe for undbouted Oracles, which (confirmed by judgment, learning, and much experience, and rightly and wel applied) are so many starres and shining lights, to direct our course in the arguing of any case: yes such is their singular and incomparable use, that, as Lords paramount, they rule and overrule the grounds themselves."

⁷¹ Davies (1628: 278): "Againe, doth [the legal profession] not register and keep in memory the best Antiquities of our Nation? doth she not preserve our ancient Customes and form of government wherein the wisdom of our Ancestors doth shine far above the policie of other Kingdoms?"

⁷² Cowel (1727, entry on 'Common Law'): "As these people had different Customs, so they inclined to the different Laws by which their Ancestors were governed; but the Customs of the West Saxons and Mercians...being preferred before the Rest, were for that Reason called Jus Anglorum... and by these Laws those people were governed for many Ages. But the East Saxons being afterwards subdued by the Danes, their Customs were introduced... The Danes being overcome by the Normans...That upon due Consideration of all those Laws and Customes the Conqueror abrogated some and established others; to which he added some of his Country Laws, which he adjudged most to conduce to the Preservation of the Peace and the Quiet and Ease of the people. And this is what we now call the Common Law."

⁷³ Fortescue (1825: 51): The realm of England was first inhabited by the Britons; afterwards it was ruled and civilized under the government of the Romans; then the Britons prevailed again; next, it was possessed by the Saxons, who changed the name of Britain into England. After the Saxons, the Danes lorded it over us, and then the Saxons prevailed a second time; at last, the Normans came in whose descendants obtain the kingdom at this day: and, during all that time, wherein those several nations and their kings prevailed, England has nevertheless been constantly governed by the same customs, as it is at present: which if they were not above all exception good, no doubt but some or other of those kings, from a principle of justice, in point of reason, or moved by inclination, would have made some alteration or quite abolished them, especially the Romans, who governed all the rest of the world in a manner by their own laws."

⁷⁴ See quote from Fortescue (1825: 51) in the previous footnote.

the English laws would have deprived him of his own inheritance.⁷⁵ Furthermore, the lawyers were also keenly aware that the environment (in the form of the rest of society) shaped the selection for legal rules. The most prominent example of the result of political pressure was Magna Carta.⁷⁶ Selden (1682; 48–49) emphasized in many other instances the influence of the nobility and the clergy on the King.⁷⁷ Selden's (1618: 488–489) story of how canon law became cemented within England is a political economy story, with the clergy taking advantage of a king's weakness and obtaining authority for canon law, which persisted for many centuries.⁷⁸

Of course, Darwinian processes are not simply about selection occurring, but also about whether that selection results in systematic changes in population characteristics; the survival of the fittest in the simplest and most popular phrasing from biology. Consistently, each lawyer-theorist showed the firm conviction that selection would result in outcomes associated with good normative properties. For Davies, for example, the process of selection weeds out unproductive customs because if a custom "had been found inconvenient [i.e. discordant, unsuitable, or even irrational]⁷⁹ at any time, it had been used no longer" (Davies, 1628: 252).⁸⁰ Similarly, Coke viewed legal process as a means of selection for rules that are socially advantageous: "[Y]et undoubtedly it is a great contentment and satisfaction to an honest mind and a good conscience...to follow the precedent of grave and reverend men: how be it for as much as all good laws are instituted, and made for the repelling of those evils that most commonly happen...and principally do respect the general peace and profit of the people" (Coke, 1764: 301–302).⁸¹

Citing Littleton as an authority, Cowel's popular law dictionary (1727, first published in 1607, entry on 'Borough English') used what was essentially an efficiency (or comparative advantage) justification for the selection for the rule in one locality that the youngest son inherits property: "[T]he reason of this custom, (says Littleton) is...that the youngest is presumed in law to be least able to shift [make a living] for himself".⁸² This general emphasis on efficiency would further evidence itself in arguments reported in specific cases. In property law, for example, Coke reported on old legal reasoning that justified a certain adjudicatory choice as promoting the "advancement of tillage, and encouragement thereunto, which is so profitable for the commonwealth" (Coke, 1809: 81).⁸³ In a similar vein, Dugdale (1671: 5) saw William the Con-

⁷⁵ Selden (1726, 1887): "But questionless the Saxons made a mixture of the British customs with their own; the Danes with old British, the Saxon and their own; and the Normans the like. The old laws of the Saxons mention the Danish law, Danelage, the Mercian law, Mercenlage, and the Westsaxon law, the Westsaxonlage, of which also some counties were governed by one, some by another. All these being considered by William I comparing them with the laws of Norway (which he most of all affected, mainly, as I think, because by them a bastard of a concubine, as himself was, had equal inheritance with the most legitimate)."

⁷⁶ Famously, Coke (1777, Report 8: 118) converted this principle of constraints on the sovereign into a point of legal principle: "The common law will control acts of parliament, and sometimes adjudge them utterly void; for when an act of parliament is against common right and reason, or repugnant, or impossible to be performed, the common law will control it and adjudge such act to be void."

⁷⁷ See, for example, Selden (1682: 48–49): "[A]ll the great men of the Countrey, who had enacted the English Laws, were presently struck into dumps, and did unanimously petition him, That he would permit them to have their own Laws and ancient Customs; in which their Fathers had lived, and they themselves had been born and bred up in; forasmuch as it would be very hard for them to take up Laws that they knew not, and to give judgment according to them. But the King appearing unwilling and uneasie to be moved, they at length prosecuted their purpose, beseeching him, that for the Soul of King Edward, who had after his death given up the Crown and Kingdom to him and whose the Laws were, and not any others that were strangers, he would hearken to them and grant that they might continue under their own Countrey Laws. Where|upon calling a Council, he did at the last yield to the request of the Barons. From that day forward therefore the Laws of King Edward, which had before been made and appointed by his Grandfather Adgar, seeing their authority, were before the rest of the Laws of the Coun|trey respected, confirmed and observed all over England."

⁷⁸ Selden (1618: 191): "And to all States the Church of Rome now grew most formidable. . . . And our Richard the first. . . to gratifie the Clergie here for their exceeding liberalitie in contribution to his Ransome from Captiuitie, with great fauour gave them an indulgent Charter of their Liberties: which. . . doubtlesse gave no small autoritie to the Exercize of The Canon Law in those things, which before about that time were diuersly otherwise. . . . Therefore it was not without reason on their side at such time as they saw the Power of Rome. . . . grew most dreadful to Prince and subject, that they should urge this on to a continuing practice . . Hence have the Canons, in this point, hitherto here continued, and have been and are binding Ecclesiastique Lawes. sailing wherein the later expresse Laws of the Kingdome crosse them . . . And thus out of the qualitie of the time . . . that receiud generall practice of Parochiall payment (neere all most according to the Canons) and other such alterations, that suddenly varied from former use."

⁷⁹ According to the OED, the weaker modern meaning of the word 'inconvenient' was not in use in the early 17th century and the older usages were much stronger, for example, absurd, inconsistent with reason or rule, immoral, or improper. This is important for fully understanding a number of the quotes below, since use of words containing the same root as inconvenient seemed to be very common among the judges.

⁸⁰ Davies (1628: 252): "But a Custome dothe never become a law to bind the people, untill it hath bin tried and approoved time out of mind; during all which time there did thereby arise no inconveniences for if it had been found inconvenient at any time, it had bin used no longer, but had become interrupted, and consequently it had lost the vertue and force of a lawe".

⁸¹ Coke (1764: 301–302): "[Y]et undoubtedly it is a great contentment and satisfaction to an honest minde and a good conscience, especially in cases that concerne the life and liberty of a man, to follow the president of grave and reverend men: how beit for as much as all good Lawes are instituted, and made for the repelling of those evils that most commonly happen: For ad ea quae frequentius accidunt jura ad prantur [laws adapt to things happening frequently] and principally doe respect the generall peace and profit of the people: and therefore we use to say, that a mischiefe is rather to be suffered then an inconvenience."

⁸² Cowel (1727, first published in 1607, entry on 'Burow English'): "Burow [i.e. Borough] English Is a Customary Descent of Lands or Tenements, whereby in all Places where this Cuftom holds, Lands and Tenements descend to the youngest Son; or if the Owner of Land have no issue, then to the younger Brother: As in Edmunton, some Part of Richmond, and other Places. And the Reason of this Custom, (says Littleton) is, for that the Youngest is presumed in Law to be least able to shift for himself."

⁸³ Coke (1809: 81): "Now others held the contrary, and that, for advancement of tillage, and incouragement thereunto, which is so profitable for the commonwealth, and by reason of the incertainty of her estate for life they held opinion, that the executors or adminiftrators of the wife should have, or she her selfe by her will might dispose them, as well as any other tenant for life might doe". Similarly, customs other than primogeniture were permissible because "this custome is allowable, because it standeth with some reason, for every sonne is as great a gentleman as the eldest sonne and perchance will

queror as choosing among an existing set of statutory laws those that "he thought most just and wholesome for this his Dominion." 84,85

Therefore, in articulating the idea that the selection of interactors would result in desirable outcomes, differences among the lawyers were not inconsistencies but rather reflected alternative phrasings of what constitutes a normatively good outcome: e.g. "[respecting] the general peace and profit of the people"; "profitable for the commonwealth"; "just and wholesome"; or simply not "inconvenient". As demonstrated above, lawyers also offered rudimentary stories about how selection processes translated into good outcomes: e.g. inconvenient customs were discarded; judges endorsed laws that had stood the test of time and customs that had not been imposed; or successful conquerors ended up selecting just laws.

But this was as far as the lawyers went: the element of the lawyers' cognitive model that was most incomplete was precisely on the relationship between selection mechanisms and the properties of outcomes. There was no clear and uniform understanding of what it really meant for an outcome to be good or bad for a society. (This should not be surprising since 21st-century welfare economics hardly gives an unequivocal answer.) There was a lack of clear comprehension of *how* specific selection mechanisms altered the overall properties of outcomes. Indeed, the lawyers seemed to simply *assume* that the properties of individual decisions would immediately become properties of systemic outcomes. One might therefore summarize the lawyers' theories as resonating with the idea that the fittest legal rules (replicators) increased in frequency relative to other legal rules in a selection process, but without having a clear conception of what 'fittest' meant and without any clear sense of the relationship between micro processes and macro outcomes. In this sense the lawyers' theories were evidently not fully Darwinian.

Once variations of legal rules have been selected for, replication with retention is needed to ensure that the selected legal rules become relatively more influential within the population. This would occur as the surviving social customs, important legal cases, and specific statutes would be imitated, form the basis of precedent, and provide input into new legislation. For example, Hale (1713, sec. X) in describing the rise of primogeniture summarizes how selection of competing inheritance practices and then subsequent replication, geographically and functionally, resulted in eventual retention of a specific legal rule: "But those honorary infeudations...did silently and suddenly assume the rule of descents to the eldest [i.e., primogeniture], and accordingly held it; and so...the use of the neighboring country might introduce the same usage here as to those honorary possessions. And because those honorary infeudations were many, and scattered almost through all the kingdom, in a little time they introduced a parity in the succession of lands of other tenures...so that without question, by little and little, almost generally in all counties of England...the generality of descents or successions...went to the eldest son."⁸⁶ And of course, the customs would enter law: "The customs of the realm...getting once an entry, are entered and hardened by succession, and after be defended as firm and stable laws" (Bacon, n.d.: 11–12).^{87,88}

Use of legal precedent is the epitome of replication with retention. At this time, English legal process was moving toward a system where precedent occupied a central place. Slade's case (Coke, 1777, Report 4: 93a) had cited past legal practice to endorse the use of precedent using arguments based on both established procedure and the necessity of following custom: "[T]herefore in [a case in 1568] it is held, that the ancient forms and manner of precedents are to be maintained and observed; and in [a 14th century judgment of the King's court in Ireland] that which has not been according to usage shall not be permitted, and in [a law of 1317] the ancient form and order is to be observed". 89 Nevertheless, past decisions were not law, but rather empirical evidence of the nature of underlying law, indeed strong evidence if there was an accumulation

grow to greater honour if he hath any thing of his ancestors" Coke (1809: 140) and "this custom also stands with some Certaine reason, because that the yonger sonne (if he lacke father and mother) because of his yong age, may least of all his brethren helpe himselfe" Coke (1809: 140).

⁸⁴ Selden (1726: 1889)Selden, 1726Selden (1726: 1889) concluded that "[a]nd no doubt is, but [the English] imitated their conquerors, and...were not backward in affecting those laws, for which the languages and rhetoric were most useful".

⁸⁵ Dugdale (1671: 5): "And long it was not, after the renowned Norman Conqueror (King Will. the first) had brought this Realm to subjection, but that he caused a view to be taken of all the before-specified Laws, and approving some, and rejecting others, adding also some of the Norman constitutions to them (as most proper for his government, considering how many of his Subjects from that Dukedome he brought over with him and setled here) made an establishment of such as he thought most just and wholesome for this his Dominion."

the Rule of Descents to the Eldest, and accordingly held it; and so altho' possibly there were no Acts of Parliament of those Elder Times, at least none that are now known of, for altering the ancient Course of Descents from all the Sons to the Eldest, yet the Use of the Neighbouring Country might introduce the same Usage here as to those honorary Possessions. And because those honorary Infeudations were many, and scattered almost through all the Kingdom, in a little Time they introduced a Parity in the Succession of Lands of other Tenures, as Socages, Valvasories, &c. So that without Question, by little and little, almost generally in all Counties of England (except Kent, who were most tenacious of their old Customs in which they gloried, and some particular Feuds and Places where a contrary Usage prevailed) the generality of Descents or Successions, by little and little, as well of Socage Lands as Knights Service, went to the eldest Son, according to the Declaration of King Edw. I in the Statute of Wales [1284]. In the Time of Hen. I [early 12th century], it seems that the whole Land did not Descend to the eldest Son, but begun to look a little that Way".

⁸⁷ Even in the Tudors' state-led, religious revolution, past customs would be endorsed: "After the dissolution of Monasteries, to which, divers Tithes and Parish Churches had been appropriated, and were now setled in the Crowne, and thence conveyed into Lay hands, an Act was made in 32. Hen. 8. cap. 7. commanding euery man, fully, truly, and effectually, to divide, set out, yeeld or pay all and singular Tithes and Offerings, according to the lawfull Customes and Usages of the Parishes and Places where such Tithes or Duties shall grow, arise, come, or be due. (Selden 1618: 243).

⁸⁸ Bacon (n.d.: 11–12): "The Customs of the Realm are properly such things as through much, often, and long usage either of simplicity or of ignorance getting once an entry, are entered and hardened by succession, and after be defended as firm and stable laws."

⁸⁹ Coke (1777, Report 4: 93a): "To which precedents and judgments being of so great number, in so many successions of ages, and in the several times of so many reverend Judges, the Justices in this case gave great regard; and so the Justices in ancient times, and from time to time did, as well in matters of form as in deciding of doubts and questions as well at the common law, as in construction of acts of parliament, and therefore in [a case in 1568] it is held,

of consistent decisions. The "decisions of courts of justice. . . have a great weight and authority in expounding, declaring, and publishing what the law of this kingdom is, especially when such decisions hold a constancy and congruity with resolutions and decisions of former times" (Hale, 1713, sec. IV.3).⁹⁰

Coke's various statements reflect how precedent provided the basis for the practices of the legal profession and, thus, selection of the lower-level interactors of the system: the law "will direct us (the learning of the law is so chained together) in many other cases" (Coke, 1628; 394).

4.3. Distinctive properties of evolutionary processes

The touchstone of the outcome from an evolutionary process of institutional change is that it is the result of many collectively unguided interactions, the "long experience, and many trials of what was best for the common good", which for Davies (1628: 255) made the common law.⁹¹ Thus, laws are produced by "time, which as it discovers day after day new inconveniencies...successively applies new remedies" (Hale, 1787: 254)⁹² and therefore "laws...are the production of long and iterated experience" (Hale, 1921: 291).⁹³

System-wide institutional development then results from shifts in the distributions of the use of different legal rules, where such shifts are viewed as a product of many different individual decisions. This is the population thinking that lies at the heart of a Darwinian approach (Mayr, 2001). In this spirit, for Hale (1713, sec. IV), "there grows insensibly a variation of the Laws", where "use and custom, and judicial decisions and resolutions, and acts of parliament. . . might introduce some new laws, and alter some old. . . [with the] variations and accessions. . . in the laws. . . being only partial and successive". ⁹⁴ Thus, institutional development is "a kind of aggregation of the discoveries, results, and applications of ages and events" (Hale, 1787: 254). ⁹⁵ Similarly, Coke (1628: 395), after surveying the work of history, was impressed with "the multitude of the conclusions in law, the manifold diversities between cases and points of learning, the variety almost infinite of authorities ancient, constant and modern, and with all their amiable and admirable consent [agreement] in so many successions of ages." ⁹⁶

that the ancient forms and manner of precedents are to be maintained and observed; and in [a 14th century judgment of the King's bench of Ireland] that which has not been according to usage shall not be permitted, and in [a law of 1317] the ancient form and order is to be observed."

⁹⁰ Hale (1713, sec. IV.3): "3. Judicial Decisions. It is true, the Decisions of Courts of Justice, tho' by Virtue of the Laws of this Realm they do bind, as a Law between the Parties thereto, as to the particular Case in Question, 'till revers'd by Error or Attaint, yet they do not make a Law properly so called, (for that only the King and Parliament can do); yet they have a great Weight and Authority in Expounding, Declaring, and Publishing what the Law of this Kingdom is, especially when such Decisions hold a Consonancy and Congruity with Resolutions and Decisions of former Times; and tho' such Decisions are less than a Law, yet they are a greater Evidence thereof than the Opinion of any private Persons, as such, whatsoever."

⁹¹ Davies (1628: 255): "But, as it is said of every Art or Science which is brought to perfection Per varios usus Artem experientia fecit [Through different usages, practice brought skill]: so may it properly be said of our Law, Per varios usus Legem experientia fecit [Through different usages, experience created the law]. Long experience, and many trialls of what was best for the common good, did make the Common Law."

⁹² Hale (1787: 254): "So that in truth antient lawes, especially, that have a common concern, are not the issues of the prudence of this or that council or senate, but they are the production of the various experiences and application of the wisest thing in the inferior world; to wit, time, which as it discovers day after day new inconveniencies, for it doth successively apply new remedies; and indeed it is a kind of aggregation of the discoveries results and applications of ages and events."

⁹³ Hale (1921: 291): "Long Experience makes more discoveries touching conveniences or Inconveniences of Laws then is possible for the wisest Councill of Men att first to foresee. And that those amendments and Supplements that through the various Experiences of wise and knowing men have been applyed to any Law must needs be better suited to the Convenience of Laws, then the best Invention of the moat pregnant witts not ayded by Such a Series and tract of Experience. And this adds to ye difficultie of a present fathomeing of the reason of Laws, because they are the Production of long and Iterated Experience which, tho' itt be commonly called the mistriss of Fooles, yett certainly itt is the wisest Expedient among mankind, and discovers those defects and Supplys which no witt of Man coud either at once foresee or aptly remedye".

⁹⁴ Hale (1713, sec. IV): "So that Use and Custom, and Judicial Decisions and Resolutions, and Acts of Parliament, tho' not now extant, might introduce some New Laws, and alter some Old, which we now take to be the very Common Law itself, tho' the Times and precise Periods of such Alterations are not explicitly or clearly known. But tho' those particular Variations and Accessions have happened in the Laws, yet they being only partial and successive, we may with just Reason say. They are the same English Laws now that they were 600 years since in the general".

⁹⁵ Hale (1787: 254): "Now a law that hath abidden the test of time, hath met with most of these varieties and complications; and experience hath in all that process of time discovered these complications and emergencies, and so has applied suitable remedies and cures for these various emergencies. So that in truth antient lawes, especially, that have a common concern, are not the issues of the prudence of this or that council or senate, but they are the production of the various experiences and applications of the wisest thing in the inferior world; to wit, time, which as it discovers day after day new inconveniencies, so it doth successively apply new remedies: and indeed it is a kind of aggregation of the discoveries results and applications of ages and events". See also Hale (1787: 254): "It is most certain, that time and long experience is much more subtile and judicious, than all the wisest and accutest wits in the world co-existing can be. It discovers such varieties of emergencies and cases, that no man could ever otherwise have imagined. It discovers such inconveniences in things, that no man would otherwise have imagined. And on the other side, in every thing that is new, or at least in most things especially relating to the lawes, there are thousands of new occurrences and entanglements and coincidencies and complications, that would not possibly have at first foreseen." When discussing the law of inheritance, Hale (1713, sec. XI) concluded that it was produced by "successive Alterations, the Process of Time, and the Wisdom of our Ancestors, and certain Customs grown up, tacitly, gradually, and successively". Hale (1713, sec. IV): äs those Exigencies and Conveniences do insensibly grow upon the People, so many Times there grows insensibly a Variation of the Laws". Also see Hale (1668): "[T]he body of Laws, that concern the Common Justice applicable to a great Kingdom is vast and comprehensive, consists of infinite particulars, and must meet with various Emergencies, and therefore requires much time

⁹⁶ Coke (1628: 394–395): "When I had finished this worke of the first part of the Institutes, and looked backe and considered the multitude of the conclusions in Law, the manifold diversities between cases and points of learning, the varietie almost infinite of authorities ancient, Constant and Moderne, and withall their amiable and admirable consent in so many successions of ages, the many changes and alterations of the Common Law, and additions to

Since an understanding of probability distributions lay in the future, one can hardly expect the lawyers to have articulated the notion of population thinking using explicit references to shifts in distributions. Nevertheless, many passages reflect a groping towards that concept. Historical analyses commonly cited systems of law in competition with each other, the outcome of which was the creation of the common law. For example, Selden (1682: 32, 48) has the legal systems of the Romans and Britons competing against each other, followed by the laws of the Mercians, Danes, and Saxons holding sway in different parts of England, engaging in competition.⁹⁷ Then, according to both Selden and Cowel (1727: entry on 'Common Law') this competition was adjudicated by the Normans, who introduced some of their own laws, the mixture resulting in the common law.⁹⁸

The lawyers' writings are also replete with statements about specific co-existing laws and customs in implicit competition with each other, and with comments on the changing adherence to different rules. For Bacon (n.d.: 318) 'in any one kingdom, which is most at unity in itself, there is diversity of customs for the guiding of property and private rights'. Oke (1628: 10, 37) saw Littleton as describing ten methods of conveyancing land and he remarks on variation across counties in the proportion of an estate to be assigned for support of a widow. Similarly, Cowel (1651: 6) makes the distinction between general customs and particular ones, the latter "in force in diverse particular counties, cities, boroughs, villages, and manors". The distribution of use of these different types of rules could vary over time, for example, because it is the task of judges to decide whether specific customs are consistent with the law. Davies (1762: 82) describes variation in inheritance practices that are "repugnant to the rule of common law", yet not unreasonable, and therefore co-existing in competition with other customs. This produces population-wide change in the distributions of the use of different rules as in Hale's (1713, sec. X) observations on the spread of primogeniture, which being "scattered almost through all the kingdom...so that without question by little and little almost generally in all counties of England...descents and successions went to the eldest son."

Law is, therefore, the result of human action, not human design, to use Hayek's formulation. For example, when discussing the law of inheritance, Hale (1713, sec. XI) concluded that it was produced by 'successive alterations, the process of time, and the wisdom of our ancestors, and certain customs grown up, tacitly, gradually, and successively'. In the passage that Hayek (1960: 58) so approvingly quotes, Hale (1921: 291) has "reason to assure myself that long experience makes more discoveries touching conveniences or inconveniences of laws than is possible for the wisest council of men at first to foresee.

the same, even since our Author [Littleton] wrote, by many Acts of Parliament, and that the like worke of Institutes had not been attempted by any of our profession whom I might imitate".

⁹⁷ Selden (1682: 32): "Julius Caesar...compelled them to swear obedience to the Latin laws, certainly he did scarce so much as abridge the inhabitants from the free use of their own laws; for the very Tributes that were imposed upon then, they in a short time shook off, by revolting from the Roman yoke." Selden (1682: 48): William the Conqueror "resolved to govern his Subjects...by Laws and Ordinances in writing to which purpose be proposed also the English Laws according to their Tripartite or threefold distinction that is to say. Merchenlage, Danlage and Westsaxenlage. Merchenlage, that is the Law of the Mercians, which was a force in the Counties of Glocester, Worcestor, Hereford, Warwick, Oxford, Chester, Salop and Stafford. Danlage, that is, the Law of the Danes, which bore sway in Yorkshire, Derby, Nottingham, Leicester, Lincoln. Northampton, Bedford, Buckingham, Hertford, Essex, Middlesex, Norfolk, Suffolk, Cambridge, Huntingdon. Westsaxenlage, that is, the Law of the West-Saxons, to which all the rest of the thirty two counties...did belong to wit, Kent, Sussex, Surrey, Berks, Southampton, Winton, Somerset, Dorset and Devon. Some of these laws he disliked and laid aside; others he approved of, and added to them, some from beyond sea out of Neustria [the lower Seine and Loire valleys]."

⁹⁸ Cowel (1727, entry on 'Common Law'): "As these people had different Customs, so they inclined to the different Laws by which their Ancestors were governed; but the Customs of the West Saxons and Mercians...being preferred before the Rest, were for that Reason called Jus Anglorum... and by these Laws those people were governed for many Ages. But the East Saxons being afterwards subdued by the Danes, their Customs were introduced... The Danes being overcome by the Normans...That upon due Consideration of all those Laws and Customes the Conqueror abrogated some and established others; to which he added some of his Country Laws, which he adjudged most to conduce to the Preservation of the Peace and the Quiet and Ease of the people. And this is what we now call the Common Law."

⁹⁹ Bacon (n.d.: 318): "For we see in any one kingdom, which is most at unity in itself, there is diversity of customs for the guiding of property and private rights: in veste varietas sit, scissura non sit [Let there be variety in the garment, but let there be no division]."

¹⁰⁰ Coke (1628: 10): "Out of that which hath beene said it is to be observed, that a man may purchase lands to him and his heires by ten manner of conveyances, (for I speake not here of Estoppels.)." Coke (1628: 38): "And note, note that by the common law, the wife shalle have for her Dower, but the third part of the Tenements which were her husbands Espousals, but by the custome of some countie shee shall have the halfe, and by the custome in some Towne or Borough, shee shall have the whole. And in all these cases shee shall be called Tenant in Dower."

¹⁰¹ Cowel (1651: 6): "A custome is either general or particuler. A generall custome is that which is observed through the whole Realme, and is more properly tearmed by us a common Right, (a) A particuler is that which is in force in divers particuler Counties, Cities, Burroughs, Villages, and Mannors. (c) The publick Judicatories also of England have their customes likewise, which are observed as strictly as Lawes. (c) But any custome which is repugnant either to Law or Reason is to be abolished."

¹⁰² Davies (1762: 82) "And altho' this custom [of tanistry, a form of inheritance in Ireland] should be repugnant to the rule of common law, this doth not prove it to be unreasonable; for the customs of Borough English, and of Gavelkind are contrary to the common law, in point of descent of inheritance, and yet are approved as reafonable customs; so the custom of turning the plough upon the headland of another; and of drying nets upon anothers land".

the Rule of Descents to the Eldest, and accordingly held it; and so altho' possibly there were no Acts of Parliament of those Elder Times, at least none that are now known of, for altering the ancient Course of Descents from all the Sons to the Eldest, yet the Use of the Neighbouring Country might introduce the same Usage here as to those honorary Possessions. And because those honorary Infeudations were many, and scattered almost through all the Kingdom, in a little Time they introduced a Parity in the Succession of Lands of other Tenures, as Socages, Valvasories, &c. So that without Question, by little and little, and Places where a contrary Usage prevailed) the generality of Descents or Successions, by little and little, as well of Socage Lands as Knights Service, went to the eldest Son, according to the Declaration of King Edw. I in the Statute of Wales [1284]. In the Time of Hen. I [early 12th century], it seems that the whole Land did not Descend to the eldest Son, but begun to look a little that Way."

And that those amendments and supplements that through the various experiences of wise and knowing men have been applied to any law [must] be better suited to the convenience of laws, than the best invention of the most pregnant wits not aided by such a series and tract of experience". 104

Then, as in modern applications of evolutionary thought, change-generating decisions are initially made with highly incomplete knowledge of outcomes, but also with awareness that appropriate adjustments will become clear ex post. Thus, for Hale (1787: 254) "in every thing that is new, or at least in most things especially relating to the laws, there are thousands of new occurrences and entanglements and coincidences and complications, that would not possibly have at first foreseen". Then, time "discovers such inconveniences in things, that no man would otherwise have imagined". 106

Not surprisingly, change is almost inevitably gradual: "[N]ature (which is the best guide) makes no leap, *Natura non facit saltum*" (Coke, 1777, Report 6: ix). 107 This is an integral part of the process of adaptation: "From the nature of laws themselves in general which being to be accommodated to the conditions, exigencies and conveniences of the people. . . as those exigencies and conveniences do insensibly grow upon the people, so many times there grows insensibly a variation of laws" (Hale, 1713, sec. IV). 108

The question of what level of optimality was obtained by the results of such processes was one freighted with political significance in 17th century England. Were these the best laws in the world, or were they the best that could develop in that particular environment? In Fortescue's (1825: 51) much-quoted formulation, global optimality is suggested: "[D]uring all that time...England has nevertheless been constantly governed by the same customs, as it is at present: which if they were not above all exception good, no doubt but some or other of those kings. . . would have made some alteration or quite abolished them". 109,110

But the conclusion of global optimality was far from universal. Hatton (1677: 24–26), contemporaneous with Coke, acknowledged that "our laws are not grown to that perfection, nor the grounds of law are not all so perfect, but that the

¹⁰⁴ Hale (1921: 291): Ägaine it is a reason for me to preferre a Law by w^{ch} a Kingdome hath been happily governed four or five hundrd yeares then to adventure the happiness and Peace of a Kingdome upon Some new Theory of my owne tho' I am better acquainted wth the reasonableness of my owne theory then wth that Law. Againe I have reason to assure myselfe that Long Experience makes more discoveries touching conveniences or Inconveniences of Laws than is possible for the wisest Councill of Men att first to foresee. And that those amendm^{ts} and Supplem^{ts} that through the various Experiences of wise and knowing men have been applyed to any Law must needs be better suited to the Convenience of Laws, then the best Invention of the most pregnant witts not ayded by Such a Series and tract of Experience."

Hale (1787: 254): "It is most certain, that time and long experience is much more subtile and judicious, than all the wisest and accutest wits in the world co-existing can be. It discovers such varieties of emergencies and cases, that no man could ever otherwise have imagined. It discovers such inconveniences in things, that no man would otherwise have imagined. And on the other side, in every thing that is new, or at least in most things especially relating to the lawes, there are thousands of new occurrences and entanglements and coincidencies and complications, that would not possibly have atfirst foreseen." lose Hale (1787: 253): "It is most certain, that time and long experience is much more subtile and judicious, than all the wisest and accutest wits in the world co-existing can be. It discovers such varieties of emergencies and cases, that no man could ever otherwise have imagined. It discovers such inconveniences in things, that no man would otherwise have imagined. And on the other side, in every thing that is new, or at least in most things especially relating to the lawes, there are thousands of new occurrences and entanglements and coincidencies and complications, that would not possibly have at first foreseen." See also Hale (1668): "The Common Laws of England are not the product of the wisdom of some one man, or Society of men in any one Age; but of the Wisdom, Counsell. Experience and Observations of many Ages of wise and observing men; where the subject of any Law is single, the prudence of one Age may go far at one Essay to provide a fit Law yet even in the wisest provisions of that kind, experience shews us that new and unthought of Emergencies often happen, that necessarily require new supplements, abatements or explanations. But the body of Laws, that concern the Common Justice applicable to a great Kingdom is vast and comprehensive, consists of infinite particulars, and must meet with various Emergencies, and therefore requires much time and much experience, as well as much wisdome and prud

¹⁰⁷ Coke (1777, Report 6: ix): "In reading these and other of my Reports, I desire the reader, that he would not read (and as it were swallow) too much at once, for greedy appetites are not of the best digestion: the whole is to be attained to by parts and nature, (which is the best guide) maketh no leap, Natura non facit faltum."

¹⁰⁸ Hale (1713, sec. IV): "First, From the Nature of Laws themselves in general, which being to be accommodated to the Conditions, Exigencies and Conveniencies of the People, for or by whom they are appointed, as those Exigencies and Conveniencies do insensibly grow upon the People, so many Times there grows insensibly a Variation of Laws, especially in a long Tract of Time; and hence it is, that tho' for the Purpose in some particular Part of the Common Law of England, we may easily say, That the Common Law, as it is now taken, is otherwise than it was in that particular [time] yet it is not possible to assign the certain Time when the Change began."

¹⁰⁹ Coke (1777, sec. III: xii) in the preface to the third of his reports in his usual style ran headlong with the authority that agreed with what he wanted: "For thy satisfaction herein, hear what Sir Jo. Fortescue knight, chief Justice of England, a man of excellent learning and authority, wrote of this matter...[if] the laws of England had not been best, those kings would have changed them". This story is repeated in Coke (1777, sec. III: xii). Coke (1777, sec. VI: i; sec. II: ix) repeats abbreviated versions in the prefaces to his second and sixth reports. See also Coke (1777, Report 3:xii): "[F]or thy fatisfaction herein, hear what Sir Jo. Fortescue, Kt. Chief Justice of England, a man of excellent learning and authority, wrote of this matter,... speaking of the laws of England; quae si optimae non extitissent, aliqui regum illorum justitia, ratione, feu affectione concitati eas mutassent, aut omnino delevissent & maxime Romani qui legibus fuis quositotum orbis reliquum judicabant." Dugdale (1671: 4): "But to derive the rise and original of our Common Laws from that fountain, is more than I dare adventure though Sir John Fortescue doth seem to incline thereto, in his commendation of the reason and equity of them, in saying, that the Romans, Saxons, Danes, or Normans would have altered them, had they not been so especially the Romans, laws to almost all the world besides."

¹¹⁰ Fortescue (1825: 51): "The realm of England was first inhabited by the Britons; afterwards it was ruled and civilized under the government of the

Romans; then the Britons prevailed again; next, it was possessed by the Saxons, who changed the name of Britain into England. After the Saxons, the Danes lorded it over us, and then the Saxons prevailed a second time; at last, the Normans came in whose descendants obtain the kingdom at this day: and, during all that time, wherein those several nations and their kings prevailed, England has nevertheless been constantly governed by the same customs, as it is at present: which if they were not above all exception good, no doubt but some or other of those kings, from a principle of justice, in point of reason, or moved by inclination, would have made some alteration or quite abolished them, especially the Romans, who governed all the rest of the world in a manner by their own laws."

contraries of some are as reasonable as our laws" and therefore "we are so far from perfection in our law".¹¹¹ Indeed, in one of Fortescue's (1825: 47) less-quoted passages, he was much closer to more modern views, when stating the objective in writing his book: "[I]f I clearly make out that [English law] is as well accommodated for the good of that state, as the civil laws are for that of the empire then I shall have made appear, that the law of England is not only an excellent law, but that, in its kind, it is as well chosen as the civil law." ¹¹²

And there were influential authors who followed Fortescue's alternative path and rejected the use of global optimality, using instead the notion of local fitness. Bacon (1859a: 32) viewed "that what is settled by custom, though it be not good, yet at least it is fit". 113 Selden (1726: 1891–1892) saw clearly the implications of this for comparisons of legal systems, hinting at the notion of second-best: "Neither are laws [of different countries] thus to be compared. Those which best fit the state wherein they are, clearly deserve the names of the best laws. And are not best or worst secundum quid [i.e. but in this way]." Notably, when Bacon (1859a: 239) did make a cross-country comparison he relied on observation of processes: the "laws of England...cannot but excel the civil laws in fitness for the government; for the civil law was non hos quaesesitum munus in usus [i.e. a gift not intended for these circumstances]; it was not made for the countries which it governs." 115

The lawyers clearly thought that they lived in a path-dependent world, which was reflected for the most part in an emphasis on persistence. The existence of an institution implied some degree of permanence, legal measures having "their force principally by virtue of institution" (Hale, 1668). 116,117 Hale (1713, sec. X) attributed the similarity between English and Scottish laws a long time after the two kingdoms had gone their own ways as due to the fact that "many of the laws in use and practice here in England were...so riveted and settled in that Kingdom, that 'tis no wonder to find they were not shaken or altered" by subsequent events. 118

Indeed, the legal community contributed to persistence and viewed this contribution as functional for the society. A tract on Habeas Corpus notable for being published in truly revolutionary times quoted an old case in which "the laws are called the great inheritance of every subject, and the inheritance of inheritances, without which inheritance we have no inheritance" (Anon, 1649: 14).¹¹⁹ Lawyers regarded it as their duty to protect that heritage: "That justice and duty oblige us to some endeavour for perpetuating that memory of our dead ancestors, from whose great cost, and long experience we have so many advantages for regulating the course of our actions in life" (Dugdale, 1671, preface).¹²⁰ The analogy between the inheritance of property by the individual and the heritage of law was made frequently, with emotive symbolism: "[W]e have such an excellent and inseparable property and ownership [in the laws], as we can neither lose it, nor any man take it

¹¹¹ Hatton (1677: 24–26): "But our Laws are not grown to that perfection, nor the grounds of Law are not all so perfect, but that the contraries of some are as reasonable as our Laws...And we are so far from Perfection in our Law, that both our Courts of Law, yea, and our Courts of Conscience...must leave some things that need reformation".

¹¹² Fortescue (1825: 47): "If therefore, under these three distinctions of the *Law of Nature, Customs* and *Statutes*, the fountains and originals of all laws, I shall prove the Law of *England* eminently to excel, then 1 shall have evinced it to be good and effectual for the government of that kingdom. Again, if I clearly make out that it is as well accommodated for the good of that State, as the Civil Laws are for that of the empire then I shall have made appear, that the Law of *England* is not only an excellent law, but that, in its kind, it is as well chosen as the *Civil Law*."

¹¹³ Bacon (1859a: 32): "It is true, that what is settled by custom, though it be not good, yet at least it is fit; and those things which have long gone together, are, as It were, confederate within themselves; whereas new things piece not so well; but, though they help hy their utility, yet they trouble by their inconformity: besides, they are like strangers, more admired, and less favoured. All this is true if time stood still; which, contrariwise, moveth so round, that a forward retention of custom is as turbulent a thing as an innovation; and they that reverence too much old limes, are but a scorn to the new."

¹¹⁴ Selden (1726: 1891–1892): "Then were natural laws limited for the conveniency of civil focicty here, and those limitations have been from thence, increased, altered, interpreted, and brought to what now they are; although perhaps saving the meerly immutable part of nature, now, in regard of their first being, they are not otherwise than the ship, that by often mending had no piece of the first materials, or as the house that's so often repaired, ut nihil ex pristina materia supersit, which yet, by the civil law, is to be accounted the same still—Little then follows in point of honour or excellency specially to be attributed to the laws of a nation in general, by an argument thus drawn from difference of antiquity, which in substance is alike in all. Neither are the laws thus to be compared. Those which best fit the state wherein they are, clearly deserve the name of the best laws. And none are best or worst but secundum quid."

¹¹⁵ Bacon (1859a: 239): "And for your majesty's laws of England, I could say much of their dignity, and somewhat of their defect; but they cannot but excel the civil laws in fitness for the government: for the civil law was non hos quaesesitum munus in usus [a gift not intended for these circumstances]; it was not made for the countries which it governeth: hereof I cease to speak, because I will not intermingle matter of action with matter of general learning."

¹¹⁶ Hale (1668) lists legal terms and then says "and infinite instances of like nature can be given, which have their force principally by virtue of institution".

117 Hale (1668): "And something Analogicall to this is to be found not only in the English Laws, but in all the Laws in the world, wherein though the first Institution thereof was not without great and profound Reason, and the same is continued with great advantage to society. and prevention of uncertainty in things, yet it were a vain thing to conclude it is irrational, because not to be demonstrated or deduced by Syllogismes: Thus in our Law the word *Dedi* creates a Warranty, the word *Concessi* creates a Covenant, the word *Heyres*, required to pass a Fee-simplc in Grants and Feoffiments; Lands in Fee-simple descend to the Uncle and not immediately to the Father, and to the eldest Son, not to all the Sons, though in fome other Countries their Laws direct Descents otherwise and infinite other Instances of like nature may be given, which have their force principally by venue of Institution, or of the common Usage of this Kingdom, which is a tacit instituion, and are of great use to preventy uncertainty".

¹¹⁸ Hale (1713, sec. X): "King Edward I having thus obtained the actual Superiority of the Crown of Scotland ···It is no Wonder that those Laws, which obtained and were in Use in England, in and before the Time of this King, were in a great Measure translated thither; and possibly either by being enacted in that Kingdom, or at least for so long Time, put in Use and Practice there, many of the Laws in Use and Practice here in England were in his Time so rivetted and settled in that Kingdom, that 'tis no Wonder to find they were not shaken or altered by the liberal Concessions made afterwards by King Edw. 3...but that they remain Part of the Municipal Laws of that Kingdom to this Day."

¹¹⁹ Anon. (1649: 14): "And in Ed. 6. fol. 6, the Laws are called the great inheritance of every Subject, and the inheritance of inheritances, without which inheritance we have no inheritance."

¹²⁰ Dugdale (1671, preface): "That justice and Duty oblige us to some endeavour for perpetuating that Memory of our dead Ancestors, from whose great cost, and long experience we have so many advantages for regulating the course of our Actions in life, is a Truthe which cannot be denied."

from us" and this ownership added to the path dependence because existing law provided the substance for the arguments and decisions in subsequent cases (Coke, 1628: 394).¹²¹

The lawyers saw the protection of their legal inheritance as functional. In fact, they were able to give theoretical justifications that were surprisingly modern in outlook. Hale (1921: 291) argued that "instituted laws...give a certainty to us", having a positive effect even though the reason for their origin was not known. Legal Bacon (1859a: 32) saw strategic complementarities between existing laws but not with new ones: "[T]hose things which have long gone together, are, as it were, confederate within themselves; whereas new things piece not so well; but, though they help by their utility, yet they trouble by their inconformity". Hale (1787: 254) viewed the strategic complementarities as arising from the development of human capital: "Every law that is old has this advantage over any new law, in that it is better known already to the people who are concerned in it, than any new law possibly can be without some length of time". Legal 124, 125

Persistence is only one manifestation of path dependence. Irreversible change reflective of idiosyncratic events is another. Selden's (1618) historical treatise on tithes contains many examples. For example, "our Richard the first...to gratify the clergy here for their exceeding liberality in contribution to his ransom from captivity, with great favour gave them an indulgent charter of their liberties: which...gave...authority to the exercise of the canon law...And thus out of the quality of the time... that received general practice of parochial payment...and other such alterations, that suddenly varied from former use and from the liberty of the lay subject, must have its original" (Selden, 1618: 488). The modern economics literature is replete with similar references to the 'quality of the time' resulting in 'received general practice', that is, historical contingency with long-lasting effect.

Idiosyncratic change is therefore part of the norm for a developing legal system, and the lawyers did not view their system as static. Nonetheless, there is an influential strand of the historical literature that has claimed that the lawyers' believed that laws were constant from time immemorial. One way to reconcile this apparent contradiction is if one invokes the distinction between the persistence of a legal system and the changes in its details. This was clearly understood by the lawyers, who were fond of the analogy to the Ship of Theseus. "Then were natural laws limited [that is, put in place] for the convenience of civil society here, and those limitations have been from thence, increased, altered, interpreted, and brought to [what they are now];...in regard of their first being, they are not otherwise than the ship, that by often mending had not piece of the first materials" (Selden, 1726: 1891–1892). In

¹²¹ Coke (1628: 394): "Ratio est anima Legis; for then are we said to know the Law, when we apprehend the reason of the Law, that is, when we bring the reason of the Law so to our owne reason, that we perfectly understand it as our owne, and then and never before, we have such an excellent and inseperable propertie and ownership therin, as wee can neither lose it, nor any man take it from us, and will direct us (the learning of the Law is so chained together) in many other Cases."

¹²² Hale (1921: 291): "The last reason touching the Inevidence of Laws already made att least in all thinges to every mans reason is this because Laws are certaine Institutions, and tho' perchanso att first the makers of them Saw reason to pitch upon this Institution rather thon another, yet in thinges thus Settled it is not necessary that the reasons of the Institution should be evident unto us. It is Sufficient that they are Instituted Laws that give a Certainty to us, and it is reasonable for us to observe them though the perticuler reason of the Institution appeare not."

¹²³ Bacon (1859a: 32): "It is true, that what is settled by custom, though it be not good, yet at least it is fit; and those things which have long gone together, are, as It were, confederate within themselves; whereas new things piece not so well; but, though they help hy their utility, yet they trouble by their inconformity: besides, they are like strangers, more admired, and less favoured. All this is true if time stood still; which, contrariwise, moveth so round, that a forward retention of custom is as turbulent a thing as an innovation; and they that reverence too much old limes, are but a scorn to the new."

¹²⁴ See also Hale (1668): "Again, were such new entire models of laws never so good, yet it is a long time before they come to be well known or understood, even to those whose business it must be to advise or judge according to them, so that even a more imperfect body of laws well known, at least to those that are to advise or judge, is more of use and convenience to the good of society, then a more perfect and complete body of laws newly fettled, and therefore to be newly learned."

¹²⁵ Hale (1787: 254): "Every law that is old hath this advantage over any new law, in that it is better known already to the people who are concerned in it, than any new law posiibly can be without some length of time; by means whereof it must needs come to pafs, that though a new law be possibly as good, and it may be in some degree better than the old, yet many great inconveniencies happen in that interval, which will occur between the promulgation of the new law, and the full and perfect knowledge thereof, in those who are concerned in that law: and if there were no other advantage of the continuance of old lawes above the inuoduchig of new but this, yet it would make people very shy and careful in changes, and most perfectly to demonstrate, that the advantage of the change would be so great, that it would preponderate this very single consideration viz. the notoriety of the old and the novelty of the new."

¹²⁶ Selden (1726: 1888): "And to all States the Church of Rome now grew most formidable. Remember but the Excommunication and Correcton suffered by Frederique Barbarossa, Henry the sixt, and other Princes of the Empire, and by our Henry the second, and King John. the stories of them are obvious. And our Richard the first, betwene these two, to gratifie the Clergte here for their exceeding liberalitie in contribution to his Ransome from Captivitie, with great favour gaue them an indulgent Charter of their Liberties: which being joined with those other prone and yeelding Admissions of the Ecclesiastique Government over the Crowne (o were the times) doubtlesse gaue no small autoritie to the Exercize of The Canon Law in those things, which before about that time were diversly otherwise. ...Therefore it was not without reason on their side at such time as they saw the Power of Rome. . .grew most dreadful to Prince and subject, that they should urge this on to a continuing practice...Hence have the Canons, in this point, hitherto here continued, and haue been and are binding Ecclesiastique Lawes. saving wherein the later expresse Laws of the Kingdome crosse them...And thus out of the qualitie of the time, with regard to the practiced insolencie of the Pope and his Clergie. . .that receiud generall practice of Parochiall payment (neere all most according to the Canons) and other such alterations, that suddenly varied from former use."

¹²⁷ Selden (1726: 1891–1892): "Then were natural laws limited for the conveniency of civil focicty here, and those limitations have been from thence, increased, altered, interpreted, and brought to what now they are; although perhaps saving the meerly immutable part of nature, now, in regard of their first being, they are not otherwise than the ship, that by often mending had no piece of the first materials, or as the house that's so often repaired, ut nihil ex pristina materia supersit, which yet, by the civil law, is to be accounted the same still...Little then follows in point of honour or excellency specially to be attributed to the laws of a nation in general, by an argument thus drawn from difference of antiquity, which in substance is alike in all. Neither are the laws

this way, Selden (1726: 1888) explains that the idea "of the laws of this realm being never changed, will be better understood". ^{128,129}

The observation that particular laws may change greatly while features of the overall system remain in place then leads directly to a theory of speciation. The process is analogous to that in the biological world, where geographical separation and continuing adaptation to the local environment lead to diversity. Hale (1713, sec. X) saw speciation in the separation of the English and Scottish legal systems: "And the reason why we have but few of their laws that correspond with ours of a later date than [circa 1300]...is because since [that time]...[Scotland] has been distinct and held little communion with us...and in so great an interval it [must] be that by the intervention and succession of new laws, much of what was so ancient...have received many alterations". ¹³⁰ Bacon, who was groping towards ideas of evolution in the natural world, saw the process of speciation clearly in the legal one: "For there are in nature certain fountains of justice [from which] all civil laws are derived [as] streams; and [as] waters [take] tinctures and tastes from the soils through which they run, so do civil laws vary according to the regions and governments where they are planted, though they proceed from the same fountains" (Bacon, 1859a: 238). ^{131,132}

Convergent evolution takes place when analogous institutional systems emerge across historically unrelated societies. English thinkers were able to see parallel structures between their own societies and those of continental Europe. Doddridge (1631: 85) observes "the great conformity that is between the common law of [this] land, and the civil law" and describes many definitions and practices that are similar.¹³³ He also hints at the process of convergent evolution: "For [since] all laws are derived from the law of nature, and do concur and agree in the principles of nature and reason; and [since] the civil laws, being the laws of the empire, do [reveal] the great wisdom whereby the Roman estate, in the time it most flourished, was governed; [since] likewise the law of this land has always followed best and most approved reason (which is also a type of human wisdom), it does ensue of necessity, that great conformity must be between [our common law and civil laws]" (Doddridge, 1631: 158–159).¹³⁴ Selden (1726: 1329) similarly hints at convergent evolution when he suggests that each country had developed methods of solving the problems of clerical over-reach: "For every Christian state has its own common laws, as this kingdom has. And the canon law everywhere, in such things as are not merely spiritual, is always governed and limited (as with us) by those common laws". ¹³⁵

Niche construction occurs when specific institutional solutions alter the society to which they apply, thereby shaping further institutional evolution. One specific example for the lawyers was the way in which the legal profession itself had such an enormous influence on the development of the common law: "Does [the profession] not preserve our ancient customs and forms of government, wherein the wisdom of our ancestors doth shine above the policy of other kingdoms?" (Davies,

thus to be compared. Those which best fit the state wherein they are, clearly deserve the name of the best laws. And none are best or worst but secundum and "

¹²⁸ Hale (1713: sec. IV) provided the same perspective: "So that Use and Custom, and Judicial Decisions and Resolutions, and Acts of Parliament, tho' not now extant, might introduce some New Laws, and alter some Old, which we now take to be the very Common Law itself, tho' the Times and precise Periods of such Alterations are not explicitely or clearly known: But tho' those particular Variations and Accessions have happened in the Laws, yet they being only partial and successive, we may with just Reason say, They are the same English Laws now, that they were 600 Years since in the general. As the Argonauts Ship was the same when it returned home, as it was when it went out, tho' in that long Voyage it had successive Amendments, and scarce came back with any of its former Materials; and as Titius is the same Man he was 40 Years since, tho' Physicians tells us, That in a Tract of seven Years, the Body has scarce any of the same Material Substance it had before."

¹²⁹ Selden (1726: 1888): "As succeeding ages, so new nations (coming in by a conqueft, although mixed with a title, as of the Norman conqueror, is to be affirmed) bring always fome alteration. By this Well confidered, that of the laws of this realm being never changed, will be better understood."

¹³⁰ Hale (1713, sec. X): "And the Reason why we have but few of their Laws that correspond with ours of a later Date than Edw. I or at least Edw. 2 is because since the Beginning of Edw. 3 that Kingdom has been distinct, and held little Communion with us till the Union of the two Crowns in the Person of King James I and in so great an Interval it must needs he, that by the Intervention and Succession of new Laws, much of what was so ancient as the Times of Edw. I and Edw. 2 have received many Alterations". See also Hale (1713: 10): "[T]he particular or Muncipal Laws and Custome of almost every country derogate from these Laws [of the Jews, Greeks, and Romans], and direct Successions in a much different way."

¹³¹ See also Selden (1726, 1891): "Divers nations, as divers men, have their divers collections and inferences; and so make their divers laws to grow to what they are, out of one and the same root. Infinite laws have we now that were not thought on [500] years since".

¹³² Bacon (1859a: 238): "Notwithstanding, for the more public part of government, which is laws, I think good to note only one deficiency; which is, that all those which have written of laws have written either as philosophers or as lawyers, and none as statesmen. As for the philosophers, they make imaginary laws for imaginary commonwealths, and their discourses are as the stars, which give little light because they are so high. For the lawyers, they write according to the states where they live what is received law, and not what ought to be law; for the wisdom of a law-maker is one, and of a lawyer is another. For there are in nature certain fountains of justice whence all civil laws are derived but as streams; and like as waters do take tinctures and tastes from the soils through which they run, so do civil laws vary according to the regions and governments where they are planted, though they proceed from the same fountains."

¹³³ Doddridge (1631: 85): "Thus much have I added out of the Civil Law, That the Student might as well in this, as in many other Titles of the Law observe the great conformity that is betweene the Common Law of the Land, and the Civill Law of the Empire". He then proceeds to describe the many definitions and practices that are similar.

¹³⁴ Doddridge (1631: 158–159): "For fith all Lawes are derived from the law of Nature, and doe concur and agree in the principles of Nature and Reason; And fith the Civill Lawes, being the Lawes of the Empire, doe bewray the great wisedome whereby the Romane estate, in the time it most flourished, was governed: Sith likewiee the Law of this Land hath alwayes followed best and most approved Reason (which is also a type of humane wisdome) it doth ensue of necessitty, that great conformity must be betweene them."

¹³⁵ Selden (1726: 1329): "For every christian state hath its own common laws, as this kingdom hath. And the canon law everywhere, in such things as are not merely spiritual, is always governed and limited (as with us) by those common laws."

1628: 278).¹³⁶ Thus, the profession influences the process of selection. Similarly, culture can affect that process, whereby the law "is so framed and fitted to the nature and disposition of this people, as we may properly say it is connatural to the nation, so as it cannot possibly be ruled by any other law" (Davies, 1628: 254).¹³⁷

Exaptation occurs when ex-post institutional adaptiveness arises for reasons unrelated to initial design. The lawyers were aware that many features of English law were useful in practice even though the original purpose was unknown to them: "[Y]et in things thus settled it is not necessary that the reasons of the institution should be evident to us" (Hale, 1921: 292).¹³⁸ In matters of law, there was a natural process whereby innovations could gain functionality independently of their original motivation: "It is sufficient that they are instituted laws that give a certainty to us...though the particular reason of the institution appear not" (Hale, 1921: 291).¹³⁹ Selden saw exaptation in the differences between the laws of the various jurisdictions that used civil law: "But it is plain, that [a large variety of important legal measures] are even in those states, where by reason of [the civil laws] first institution, they retain a kind of authority, ordered by most various customs and new statutes of several provinces and cities, so differing from those old [laws], that the whole face and course of them is exceedingly changed in practice" (Selden, 1726: 1330).¹⁴⁰

5. Normative lessons on theories of institutional development and change

The lawyers were practical men, in that they were more interested in legal and political application than scholarship per se. Nonetheless, they were well aware that their actions could affect the development of English law, and, more broadly, English politics. Hence thinking about normative issues—when law should change and how and in what way it should change—was an integral part of their work. In this section, we summarize the normative insights of the lawyers. In contrast to the previous section, we do not make comparisons to contemporary theorizing and policy-making, but rather leave these to the reader.

The lawyers' normative claims rested on two planks. First there was their view that legal and/or cultural processes somehow select efficient solutions, a view that we have emphasized above rested more on assumption than a fully worked out theory. Second, the lawyers thought that the results of time's process embodied a certain kind of democratic assent.

Section 4 already discussed the lawyers' rudimentary analysis of efficiency. Davies (1628: 256) for example theorized that the ancient laws survived when they were "honorable and profitable both for the prince and people". All Coke (1777, sec. VII: xviii-xix) viewed "these ancient and excellent laws of England" as being "apt and profitable for the honorable, peaceable, and prosperous government of this kingdom". Showing how broadly accepted was this methodology of attributing normative properties to selective processes, Wiseman (1686: 212–213), a proponent of the civil law, was able to hoist the commonlawyers with their own petard: "Roman civil law has had the singular honour and prerogative which no other law has had, to be rescued from that universal deluge of abolition...and not only to out-live Rome itself, but to withstand many dangerous assaults and casualties...and to continue to this very time...[The] cause must...be some especial excellency and rare wisdom that is in the law itself; for else why have not other Laws continued as long...?" 143

¹³⁶ Davies (1628: 278): "Againe, doth [the legal profession] not register and keep in memory the best Antiquities of our Nation? doth she not preserve our ancient Customes and form of government wherein the wisdom of our Ancestors doth shine far above the policie of other Kingdoms?"

^{137 (}Davies 1628: 254): "Briefely, it [the common law] is so framed and fittled to the nature and disposition of this people, as we may properly say it is connaturall to the Nation, so as it cannot possibly be ruled by any other Law."

¹³⁸ Hale (1921: 291): "The last reason touching the Inevidence of Laws already made att least in all thinges to every mans reason is this because Laws are certaine Institutions, and tho' perchanso att first the makers of them Saw reason to pitch upon this Institution rather thon another, yet in thinges thus Settled it is not necessary that the reasons of the Institution should be evident unto us. It is Sufficient that they are Instituted Laws that give a Certainty to us, and it is reasonable for us to observe them though the perticuler reason of the Institution appeare not."

¹³⁹ Hale (1921: 291): "The last reason touching the Inevidence of Laws already made att least in all thinges to every mans reason is this because Laws are certaine Institutions, and tho' perchanse att first the makers of them Saw reason to pitch upon this Institution rather than another, yet in thinges thus Settled it is not necessary that the reasons of the Institution should be evident unto us. It is Sufficient that they are Instituted Laws that give a Certainty to us, and it is reasonable for us to observe them though the perticuler reason of the Institution appeare not."

¹⁴⁰ Selden (1726: 1330): "But it is plain, that for the most part, the disposition of inheritances, punishing of crimes, course of proceedings, dowers, testaments, and such other, which are of greatest moment under the legal rule, are even in those states, where by reason of [the civil laws] first institution, they retain a kind of authority, ordered by most various customes and new statutes of several provinces and cities, so differing from those old [laws], that the whole face and course of them is exceedingly changed in practice."

¹⁴¹ Davies (1628: 256): "Assuredly the Norman Conqueror found the antient laws of England so honorable and profitable both for the Prince and people, as that he thought it not fit to make any alteration in the fundamental points of substance thereof."

¹⁴² Coke (1777, sec. VII: xviii–xix): "The certain and continual practice of the common laws of England, soon after the conquest, even in the time of King Henry the first, the Conqueror's son, (which almost was within the smoak of that fiery conquest) and continued ever since, do plainly demonstrate that those laws were before the days of William the Conqueror. For it had not been posiible to have brought the laws to such a perfection as they were in the reign of K. H. 2. succeeding, if the same had been so suddenly brought in or instituted by the Conqueror: of which laws this I will say, that there is no human law within the circuit of the whole world, by infinite degrees, so apt and profitable for the honorable, peaceable, and prosperous government of this kingdom, as these ancient and excellent laws of England be."

¹⁴³ Wiseman (1686: 212–213): "Thus much may very well suffice to shew how the Roman Civil Law has had the singular honour and prerogative which no other Law has had, to be rescued from that universal deluge of abolition, which hath swept away all other ancient Laws besides it; and not onely to out-live Rome itself, but to out-stand many dangerous assaults and casualties, and divers sharp penal Edicts that have been made against it, and to continue to this very time a large and, accomplished body. This surely next to the Providence of God, who hath so disposed it, must needs be ascribed, and the cause must needs be conceived to be, some especial excellency and rare wisedom that is in the Law itself; For else why have not other Laws continued as long, as that has done?"

Legal process was also viewed as producing consent, or in more modern terms democratic choice. For Hale (1921: 294–295), 'long custom and usage...carries...a facile consent of the governors and the governed'. 144 For Davies (1762: 87), this was because the making of law from custom reflected revealed preference: "[N]o law binds the people only that which is made by consent of the people; for consent may be expressed as well by deed, as by word, and that which is expressed by deed is stronger than that which is expressed by word, and that which is expressed by several and continual acts of the same kind, is a custom...which has the virtue and force of a law". 145 In contrast, "the written laws...are imposed upon the subject before any trial or probation made, whether the same be fit and agreeable to the nature and disposition of the people, or whether they will breed any inconvenience" (Davies, 1628: 252). 146

These analyses led to the emphasis on legal process, which was the "wisest expedient among mankind" (Hale, 1921: 291), 147 producing a set of laws "which has been refined and perfected by all the wisest men in former succession of ages and proved and approved by continual experience to be good and profitable for the common wealth" (Coke, 1777, sec. IV: v-vi). 148 Emphasis on process meant distrust of abstract theorizing: "[I]t is reasonable for me to prefer a law made by a hundred or two hundred persons of age wisdom experience and interest before a law excogitated by myself...though I discern better the reason of that law that I have thought of than the reason of the law of those wise men" (Hale, 1921: 291). 149 Therefore, it is "a foolish and unreasonable thing for any to find fault with an institution because he thinks he could have made a better [one] or expect a mathematical demonstration to evince the reasonableness of an institution or the self-evidence thereof" (Hale, 1921: 291). 150

This reasoning led to a reverence of existing institutions. But this was not simply instinctual conservatism. Rather it followed a Darwinian style of theorizing, for survival in a selection process was evidence of fitness, with the lawyers assuming that fitness meant a matching of the normative needs of society (see Section 4.2). Legal and/or cultural processes selected what was "good and beneficial" or "apt and agreeable to [the people's] nature and disposition" (Davies, 1628: 252), repelling "those evils that most commonly happen" and respecting "the general peace and profit of the people" (Coke, 1764: 301–302). However naïve such a strong conclusion would be judged today, it is easy to see how it can follow from using a strong set of assumptions within a Darwinian theory, assumptions, for example, on the relative speed of environmental change, mutation, and selection, and the match between selection criteria and society's normative needs. Thus, for example, precedent should have force because the past produced laws with a 'tolerable efficiency' (Aldrich et al., 2008) within the given environment. Moreover, the retention provided by precedent could trump the process of pure reason: in Slade's case the court resolved "that common course makes a law, altho'...perhaps reason wills the contrary; but there the justices said, we cannot change the law now, for that would be inconvenient...the course of a court makes a law" (Coke, 1777, Report 4: 93b). See At one level, this could seem hopelessly illogical, perhaps a "professional tendency to confuse law and history"

¹⁴⁴ Hale (1921: 294–295): "2. By longe Custome and usage w^{ch} carries in it Selfe a facile Consent of the Govern^{rs} and Governed, or is att least an Evidence or Interpretation of the Originall Institution of the nature of the Governm^t or of the initial part between the Govern^{rs} & Governm^t."

¹⁴⁵ Davies (1762: 87): "And so the rule 44 Ed. 3. 19. is true, that no law binds the people only that which is made by consent of the people; for consent may be expressed as well by deed, as by word, and that which is expressed by deed is stronger than that which is expressed by word and that which is expressed by several and continual acts of the same kind, is a custom; and so briefly, custom is a reasonable act, re-iterated, multiplied, and continued by the people time out of mind. . . . And this is the definition of custom, which hath the virtue and force of a law."

¹⁴⁶ Davies (1628: 252): "And this Customary Lawe is the most perfect and most excellent, and without comparison the best, to make and preserve a Common-wealth: for the written lawes which are made eyther by the edicts of Princes, or by Counsells of Estate, are imposed upon the subject before any Trial or Probation made, whether the same be fit and agreeable to the nature and disposition of the people, or whether they will breed any inconvenience or no."

¹⁴⁷ Hale (1921: 291): "And this adds to ye difficultie of a present fathomeing of the reason of Laws, because they are the Production of long and Iterated Experience which tho' itt be commonly called the mistriss of Fooles, yett certainly itt is the wisest Expedient among man-kind, and discovers those defects and Supplys which no witt of Man coud either at once foresee or aptly remedye."

¹⁴⁸ Coke (1777, sec. IV: v-vi): "For any fundamental point of the ancient Common laws and customs of the realm, it is a maxime in policy, and a trial by experience, that the alteration of any of them is most dangerous; for that which hath been refined and perfected by all the wisest men in former succession of ages and proved and approved by continuall experience to be good & profitable for the commonwealth, cannot without great hazard and danger be altered or changed."

¹⁴⁹ Hale (1921: 291): "There are many thinges especially in Laws and Govcrnments yet mediately Remotely and Consequentially are reasonable to be approved, though tho reason of the party doth not presently or imediately & distinctly See its reasonableness. For Instance, itt is reason- able for me to preferre a Law made by a hundred or two hundred persons of age wisdome Experience and Interest before a Law excogitated by my Selfe yet it may be a Simple unexperienced younge man, though I discerne better ye reason of that Law that I have thought of then ye reason of the Law of those wise men."

¹⁵⁰ Hale (1921: 291): "And tis a foolish and unreasonable thing for any to find fault wu an Institution because he thinkes he could have made a better or expect a Mathematicall Demonstration to evince tho reasonableness of an Institution or the Selfe Evidence thereof."

¹⁵¹ Davies (1762: 87): "For where the people find any act to be good and beneficial, and apt and agreeable to their nature and disposition, they use and practice it from time to time, and so by frequent iteration and repetition of the act, a custome is formed, and being used time out of mind, it obtains the force of a law." Coke (1764: 301–302): "For ad ea quae frequentius accidunt jura ad prantur [laws adapt to things happening frequently] and principally doe respect the generall peace and profit of the people: and therefore we use to say, that a mischiefe is rather to be suffered then an inconvenience."

¹⁵² Coke (1777, Report 4: 93b): "In a writ of error brought by John Paston, to reverse an outlawry against him, he did not surmise in the writ at whose suit he was outlawed, and all the Justices said it was a strange writ, and no certainty supposed thereby; for by the writ it did not appear whether he was outlawed at the suit of the party or at the King's suit, or in what suit, or for what thing, and it might be that he was outlawed for felony, debt, trespass, account or fine to the King, but when the court was informed that the ancient form was such, then they changed their opinion and awarded the writ good, and resolved, that common course makes a law, altho' now as it was there said, perhaps reason willeth the contrary; but there the Justices said, we cannot change the law now, for that would be inconvenient, and therewith agrees Long 5. E. 4.1. where it is said, that the course of a court makes a Law."

(Baker, 1975: 3). 153 But at another level—evolutionary theory applied to a world of bounded rationality—this is exactly what a Bayesian would conclude if confidence in the quality of the selection process was greater than faith in human reason.

Nevertheless, the inevitability of a changing social and politico-economic environment implied the need for change in institutions, for "he, that thinks a state can be exactly steered by the same laws in every kind, as it was two or three hundred years since, may as well imagine, that the clothes that fitted him when he was a child should fit him when he is grown a man. The matter changes the custom; the contracts the commerce; the dispositions educations and tempers of men and societies change in a long tract of time; and so must their laws in some measure be changed" (Hale, 1787: 269). Moreover, change *was* feasible: "We are not without excellent and happy examples of ['reformation of the law'] to the general good and advantage of mankind; yea, and for the very preservation of the laws themselves, which without due husbandry of them will die of themselves, like trees that want pruning" (Hale, 1787: 266). ¹⁵⁵

Hence the lawyers considered how they should approach change. Consistently, they emphasized caution: "For any fundamental point of the ancient common laws and customs of the realm, it is a maxim in policy...that the alteration of any of them is most dangerous" (Coke, 1777, sec. IV: v). 156 For new models of law when put into practice are found "either too strait or too loose, or too narrow, or too wide, and new occurrences...either disjoint or disorder the fabric and therefore such new models continually stand in need of many supplies, and abatements, and alterations, to accommodate them to common use and convenience" (Hale, 1668). 157 Therefore, while reform was necessary, deliberation on the benefits and costs of reform ought to consider "[h]ow and by what means the remedy may be commensurate to the mischief" (Hale, 1700: 2). 158

But cautiousness was not the only lesson. There was the central role of trial and error, acknowledged even by Wiseman (1686: 264) as "the touchstone of laws". ¹⁵⁹ Thus, reliance on trial and error, passage of time, and experience are viewed as crucial to institution-building because "time and long experience...discovers such varieties of emergencies and cases, that no man could ever otherwise have imagined" (Hale, 1787: 254)¹⁶⁰ and these "new and unthought of emergencies...necessarily require new supplements, abatements or explanations" (Hale, 1668). ¹⁶¹ Thus, reform should be undertaken in full knowledge that it is only a first step in a long process of adjustment that will "discover defects and inconveniences and...apply apt supplements and remedies for them" (Hale, 1668). ¹⁶²

These principles had real bite in practice. In his report on Slade's case, Coke (1777, Report 4:93a) related that "when the court was informed" of the true nature of ancient legal processes "then [the court] changed [its] opinion...and resolved,

¹⁵³ Baker (1975: 3): "The deceptive proximity of the sixteenth century (compared with the so-called middle ages), and the professional tendency to confuse law and history, easily generated assumptions that what became law must have been "right": that it was the inevitable consequence of the relentless march of progress."

^{154 (}Hale 1787: 269). "Nay, if we come to the year-books of the time of E. 3. any man, that knowes any thing in this kind, will most certainly find, that it cannot fit us; for where is there now one assise or real action brought, unless where they have no other remedy? So that the stream of things as it were left that channell, and taken a new; and he, that thinks a state can be exactly steered by the same lawes in every kind, as it was two or three hundred years since, may as well imagine, that the cloaths that fitted him when he was a child should fit him when he is grown a man. The matter changeth the custom; the contracts the commerce; the dispositions educations and tempers of men and societies change in a long tract of time; and so must their lawes in some measure be changed."

¹⁵⁵ Hale (1787: 266) "We are not without excellent and happy examples of reformation in this kind ["reformation of the law"] to the general good and advantage of mankind; yea, and for the very preservation of the lawes themselvess, which without due husbandry of them will dye of themselves, like trees that want pruning."

¹⁵⁶ Coke (1777, sec. IV: v-vi): "For any fundamental point of the ancient Common laws and customs of the realm, it is a maxime in policy, and a trial by experience, that the alteration of any of them is most dangerous; for that which hath been refined and perfected by all the wisest men in former succession of ages and proved and approved by continuall experience to be good & profitable for the commonwealth, cannot without great hazard and danger be altered or changed."

¹⁵⁷ Hale (1668): "The Common-Laws ot England are settled and known; every entire new modell of Laws labours under two great difficulties and inconvenicnics viz First, that though they feem specious in the Theory, yet when they come to be put in practise, they are found extremely defective either too strait or too loose, or too narrow, or too wide, and new occurrences, that neither were or well could be at first in prospect, discover themfelves, that either disjoynt or disorder the Fabrick; and therefore such new modells continually stand in need of many supplyes, and abatements, and alterations, to accommodate them to Common use and convenience, wherey in a little time the original is either wholly laid aside, or in a great measure lost in its amendments, and become the least part of the law."

^{158 (}Hale 1700: 2): "In this, as in all other Applications of Remedies to any Mischiefs, these things must be considered. 1. How and by what means the Remedy may be commensurate to the Mischief?"

¹⁵⁹ Wiseman (1686: 264): "Lastly, Trial, that is the Touchstone of Laws, as of all things else whatsover has exalted it above all other Laws of man."

¹⁶⁰ Hale (1787: 254): "It is most certain, that time and long experience is much more subtile and judicious, than all the wisest and accutest wits in the world co-existing can be. It discovers such varieties of emergencies and cases, that no man could ever otherwise have imagined. It discovers such inconveniences in things, that no man would otherwise have imagined. And on the other side, in every thing that is new, or at least in most things especially relating to the lawes, there are thousands of new occurrences and entanglements and coincidencies and complications, that would not possibly have atfirst foreseen."

¹⁶¹ Hale (1668): "The Common Laws of England are not the product of the wisdom of some one man, or Society of men in any one Age; but of the Wisdom, Counsell. Experience and Observations of many Ages of wise and observing men; where the subject of any Law is single, the prudence of one Age may go far at one Essay to provide a fit Law yet even in the wisest provisions of that kind, experience shews us that new and unthought of Emergencies often happen, that necessarily require new supplements, abatements or explanations."

¹⁶² Hale (1668): "But the body of Laws, that concern the Common Justice applicable to a great Kingdom is vast and comprehensive, consists of infinite particulars, and must meet with various Emergencies, and therefore requires much time and much experience, as well as much wisdome and prudence successively to discover defects and inconveniences and to apply apt supplements and remedies for them. and such are the Common-Laws of England, namely the productions of much Wisdome, Time and Experience."

that common course makes a law". 163,164 On the transplanting of laws Hale concluded that "[foreign] law was contrived with most perfect wisdom for that people...But to translate that law to another people, to whom it was not accommodate, were a wrong" (Hale, 1787: 260). 165 Importantly, at a time when statutory review by judges was becoming more explicit, the normative reasoning was applied to how judges should approach the application of non-common-law reasoning (i.e. the principles of equity) when reviewing the application of new statutes. Thus, "whensoever any statute shall be made for the enlargement of the common law...such a statute shall be expounded by equity" (Hake, 1953: 89). 166 But "statutes which are made in restraint or abridgement of the common law shall be expounded *stricti juris* [i.e. according to strict law], and not by equity" (Hake, 1953: 91). 167, 168 That is, when the statute endorsed the past results of the common-law process it would be subject to much less rigorous oversight by the judges, because that process had produced reliable law. But when the lawmakers reversed the results of the common-law process, the lawmakers were much more likely to be in error, and needed stricter scrutiny.

Hale (1787) also considered the very modern question of the most appropriate juncture for reforms, whether in crisis or normal times. As a person who had headed a law-reform commission during the only decade in millennia in which the English had no monarch, he certainly had an empirical basis for his theories: "Touching the time or season for [reform], it must be observed that it is not every parliament that is fit for such a business...It must be in such a time when there is great tranquility at home and little engagement abroad that the parliament may resolvedly, patiently, attentively, and constantly apply itself to the work. Otherwise it will not be at all done, or not half done, or perchance overdone, which is worse than if not done at all" Hale (1787: 273–274). 169 This judgment obviously reflects both Hale's own experiences and his conservatism that was a direct product of an evolutionary cognitive model of the world.

It is abundantly clear that the lawyers had a distinctive view of how to approach institutional development, one that is timeless given its dependence on a general, coherent, methodological approach. Thus our 17th century lawyers would have agreed with the judgment of Nelson and Winter (1982: 404) more than three centuries later that "the evolutionary perspective is fully and necessarily consistent with a view of normative analysis". As the above shows, this perspective is distinctive, one that differs markedly from many elements of the normative view that is common today in economic theory and policy-making. We leave the reader to judge whether the lawyers have something to offer to the twenty-first century.

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¹⁶³ Baker (1971: 221) comments on the same case that "[t]he principal authority advanced for the King's Bench view was the continuous practice of the court itself. When pressed to expound their doctrine rationally, the judges seem to have been less than confident". Our exposition above shows the rationality of this doctrine. Perhaps the judges felt no need to expound on a principle that was so well accepted at the time.

¹⁶⁴ Coke (1777, Report 4: 93b): "In a writ of error brought by John Paston, to reverse an outlawry against him, he did not surmise in the writ at whose suit he was outlawed, and all the Justices said it was a strange writ, and no certainty supposed thereby; for by the writ it did not appear whether he was outlawed at the suit of the party or at the King's suit, or in what suit, or for what thing, and it might be that he was outlawed for felony, debt, trespass, account or fine to the King, but when the court was informed that the ancient form was such, then they changed their opinion and awarded the writ good, and resolved, that common course makes a law, altho' now as it was there said, perhaps reason willeth the contrary; but there the Justices said, we cannot change the law now, for that would be inconvenient, and therewith agrees Long 5. E. 4.1. where it is said, that the course of a court makes a Law."

¹⁶⁵ Hale (1787: 260): "Upon the whole therefore, I conclude, that [foreign] law was contrived with most perfect wisdom for that people, and during that state; and therein consisted in a great measure the wisdom of it in that accommodation. But to translate that law to another people, to whom it was not accommodate, were a wrong to the divine wisdom."

¹⁶⁶ Hake (1953: 89): "The third rule or ground of exposition of statutes is that whensoever any statute shalbe made for the enlargement of the Common lawe and is for a generall benefytt, such a statute shalbe expounded by Equity."

¹⁶⁷ See also Hatton (1677, index): "Statutes ampliative of the common law, supplying a defect therein, and reforming matters needful in the Commonwealth, to be reformed, may he expounded by equities". And Hatton (1677: 76) "those statutes...that derogate from the common law...must be strictly taken". For the source of these quotes, note that the index to Chapter V of Hatton summarizes part of its contents as follows: "Of Intepretations of Statutes according to Equities, so far forth as Epicaia goeth. 1. Statutes ampliative of the common Law, supplying a defect therein, and reforming matters needful in the Commonwealth, to be reformed, may he expounded by Equities" Hatton (1677, index); and Hatton (1967: 75–76) "I agree that those Statutes which are greviously Penal, and those that derogate from the Common Law, and those that save not in their general disposition persons commonly in all Laws favoured, as Infants, Femes Covert, Men beyound the Seas, Men in service of their Prince, such as are imprisoned, such as are of Non sane memory must be strictly taken; except there be especial Warrant to take them by Equities."

¹⁶⁸ Hake (1953: 91): "[t]here is another rule or grownde mentioned, namely, that statutes which are made in restraynte or abridgement of the Common lawe shalbe stricti juris, and not by Equity. And this shalbe the fyveth generall rule."

¹⁶⁹ Hale (1787: 271, 273–274): "Touching the time or season for such a business [the manner, the persons, and the season of public undertaking of the reformation of the laws], it must be observed that it is not every parliament that is fit for such a business. When either the times are turbulent or busy, or when other occasions of state are many great or important, that is not a season for such an undertaking, for it is not possible amoung such hurries of business, there can be that attendance upon and attention unto a business of this nature, as in truth it requires. It must be in such a time when there is great tranquility at home and little engagement abroad that the parliament may resolvedly, patiently, attentively, and constantly apply itself to the work. Otherwise it will not be at all done, or not half done, or perchance over done, which is worse than if not done at all."

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