I'm not a robot

The historical backgroundAt the heart of social contract theory is the idea that political legitimacy, political authority, and political obligation are derived from the consent of the governed, and are the artificial product of the voluntary agreement of free and equal moral agents. On this view, legitimacy and duty depend on a concatenation of voluntary individual acts, and not on ‘natural’ political authority, patriarchy, theocracy, divine right, necessity, custom, convenience, or psychological compulsion. Michael Oakeshott was thus right to call contractarianism a doctrine of ‘will and artifice’ (1975a, p. 7).While traces of contract theory can be found in ancient and medieval thought, and while the doctrine has recently been revived by John Rawls, it is generally agreed that the golden age of social contract theory was the period 1650–1800, beginning with Hobbes’s Leviathan (1651) and ending with Kant’s Rechtslehre (Metaphysics of Morals, 1797;Rawls 1972, pp. 11–13; Riley 1982, 1983). For at least the following century it was eclipsed by utilitarianism, Hegelianism, and Marxism. But between the mid-seventeenth and the early nineteenth centuries consent emerged as the leading doctrine of political legitimacy. Hobbes urges in chapter 42 of Leviathan that ‘the right of all sovereigns is derived originally from the consent of every one of those that are to be governed’, and in chapter 40 he insists that human wills ‘make the essence of all covenants’ (Hobbes 1991, pp. 395, 323). Locke in the second of his Two Treatises of Government argues that ‘voluntary agreement gives … political power to governors’ (TTG, ii, §173, p. 383). "We Shall Force them to be Free."Rousseau's famous statement in The Social Contract has been called into question by a number of critics who believe that the idea of "force" negates the requirement that a contract be entered into voluntarily. Contract theory - as distinct from social contract theory - permits individuals to abstain from entering into a contract. Rousseau, however, holds that even individuals who disagree with elements of the social contract must nevertheless agree to abide by it or risk punishment. This perspective, however, ignores the fact that social contract theory is more of a philosophy than an actual contract, and is thus not held to the same standards. Tacit ConsentRousseau specifies that by taking up residence in civilized society, individuals tacitly consent to the dictates of the social contract. However, how can it be guaranteed that every resident is fully cognizant of the specifics of the social contract? For example, consider a squatter who has spent his entire life living in a small hut in the woods. One day, a government representative arrives to lay claim to the trees surrounding his abode. While the man has no legal right to what he considers "his" land, he certainly seems justified in being angered at the idea. Indeed, one might argue that he does not necessarily have an explicit awareness of the contract that he "signed" simply by choosing not to flee the United States. Social contract theory includes no clause to exempt individuals who are not cognizant of the fact that they have entered into a contract from punishment. Ethics vs. JurisprudenceWhile Rousseau's work is certainly admissible on a moral or philosophical level, many criticize his apparent efforts to position social contract theory as a legitimate means for governing the people. As Ronald Dworkin writes in Law Empire (1986):So some political philosophers have been tempted to say that we have in fact agreed to the social contract of that kind tacitly, by not just emigrating when we reach the age of consent. But no one can argue that very long with a straight face. Consent cannot be binding on people, in the way this argument requires, unless it is given more freely, and with more genuine alternate choice, than just by declining to build a life from nothing under a foreign flag. And even if the consent were genuine, the argument would fail as an argument for legitimacy, because a person leaves one sovereign only to join another; he has no choice to be free from sovereigns altogether. Social contract theory is a philosophical theory that believes societies can only achieve stability and civility based upon an implied or explicit social contract. A social contract is an agreement among individuals within a social group to abide by certain rules and laws for mutual safety and defence. In its modern form, the idea was reintroduced by Thomas Hobbes and further developed by John Locke, Jean-Jacques Rousseau, and Immanuel Kant. After Kant, the concept fell out of popularity among philosophers until it was brought back by John Rawls. The basic concept is that the consent of people within a society to be subject to rules and laws gives those rules and laws legitimacy (D’Agostino et al., 2021). According to social contract theory, individuals that live in a given community have explicitly or tacitly consented to surrender at least some of their freedoms and submit to the ruling authority in exchange for their protection and the maintenance of the social order (Castiglione, 2015). The social contract is a concept in moral and political philosophy the most famous forms of which come from the Age of Enlightenment. It usually concerns the legitimacy of the state’s authority over the individuals it governs (Gough, 1938). During the 17th and 18th centuries, several notable thinkers explored the ideas of the social contract and natural rights. The theory takes its name from Rousseau’s 1762 book, The Social Contract (French: Du contrat social ou Principes du droit politique). These philosophers argued that humans on an individual level are free to do whatever they want. However, freedom leads to chaos and insecurity for both the individual and society. Hobbes called this the ‘state of nature.’ To escape the state of nature, individuals within a social group agree to give up their right to do whatever they want, and instead submit an authority. In exchange, they get order and security. Plato’s Republic is the first known text to discuss a concept resembling a social contract. In this text, Glaucon, one of Socrates’ interlocutors, tells a hypothetical story of how the social contract originated (The Republic, Book II). According to Glaucon, individuals used to live in fear of one another. To allay their fear, they sought to protect themselves by amassing power. However, they later realized that this life of endless power struggle was unsustainable as it caused endless conflict. As a solution, these individuals in Glaucon’s story came together and agreed to establish a “social contract.” Through this contract, they gave up some of their power and wealth to an established authority figure in exchange for mutual protection. Epicurus (341-270 BCE) was the first philosopher who saw justice as arising from a social contract instead of nature. He argued that “there never was such a thing as absolute justice, but only agreements made in mutual dealings among men in whatever places at various times providing against the infliction or suffering of harm” (Principal Doctrines, §33). The first modern thinker to articulate a comprehensive theory of the social contract was the English philosopher Thomas Hobbes (1651/2009). According to Hobbes, individuals living in the state of nature were “solitary, poor, nasty, brutish, and short.” Their short-sightedness and self-interest meant that they could not achieve self-betterment. Hobbes argued that society truly began when humans sought to escape from a state of endless conflict and agreed to a social contract. Early humans in the state of nature came together and surrendered some of their individual rights in exchange for mutual security. A society was established and a sovereign entity emerged. John Locke’s (1689/1821) understanding of the social contract shared some similarities with Hobbes’ but also had some notable differences. Like Hobbes, John Locke asserted that early humans must have come together as a society to overcome the ‘state of nature.’ However, according to Locke, people living in the state of nature were still bound by law. He called this the Law of Nature. According to this law, man has the “power … to preserve his property; that is, his life, liberty and estate against the injuries and attempts of other men” (Locke, 1689/1821). These natural rights, however, were under threat because they had no protection from a government. They had no recourse if their rights were violated. As a result, they lived in fear. Therefore, people came together to agree to form a state that would provide a neutral judge who would protect citizens. The social contract theory of Jean-Jacques Rousseau differs significantly from the previous examples. Rousseau has a more collectivist approach according to which the foundations of society rest on the sovereign “general will.” In simple terms, the general will is the collective will of all citizens, as opposed to their individual interests. Rousseau believed that legitimacy comes only from the general will. The social contract, according to Rousseau, can be summarized as follows: “Each of us puts his person and all his power in common under the supreme direction of the general will; and in a body, we receive each member as an indivisible part of the whole” (Rousseau, 1762/1997). Immanuel Kant, another Enlightenment philosopher, outlined his understanding of the social contract in “The Metaphysics of Morals” (1797/1999). Like his compatriots, Kant saw the social contract as a set of rules for members of a state that delivers mutual benefit in the form of protection and security. However, Kant did not believe consent to be essential for the social contract to exist. Indeed, all of us who live today were born into a social contract that we were not party in creating. While the above philosophers all proposed that the social contract required ceding individual sovereignty to others, Pierre-Joseph Proudhon proposed a version that does not. Proudhon believed that the social contract was not an agreement between an individual and a state. Rather, it is a contract among sovereign individuals who agree not to harm, coerce, or control each other (Proudhon, 2007). Rawls (1999), building on the work of Immanuel Kant, proposed what’s called a contractarian approach to the social contract. In this approach, Rawls put forward the following thought experiment. Imagine if you were asked, before you were born, what principles of justice and social organization should exist. Because you’re not born yet, you don’t know what your gender, race, income, wealth, etc. will be. He called this the “original position.” From the original position, people would set aside their preferences behind a “veil of ignorance” and agree to a set of common principles of justice and organization—in other words, a social contract. David Gauthier (1987) posits that cooperation between two independent and self-interested individuals is possible, particularly when it comes to exploring morality and politics. In his version of the social contract, elements such as trust, rationality, and self-interest encourage each party to be truthful and discourage them from violating the rules. Philip Pettit, in his book “Republicanism: A Theory of Freedom and Government” (1999), argues for an update to the conventional idea that the social contract is based on the consent of the governed. Explicit consent, according to Pettit, does not work because consent can be manufactured. Instead, he simply believes that the legitimacy of the social contract exists because there has not yet been an effective rebellion against it. See More Social Contract Examples Here Social contract theory is critiqued on the grounds that it is a theory that tends to conceptualize the “liberal individual” at the heart of the theory as a white male. This critique tends to come from feminist and critical race scholars. The feminist critique holds that Western liberal democratic social contracts have been developed with liberalism afforded primarily to men, for whom constitutions, laws, and contracts are constructed. For example, Carole Pateman (1988) argues that most social contracts have the effect of governing men’s domination over women. This codifies an overtly patriarchal and misogynistic cultural ideal into law. Her examples focus on marriage and surrogate motherhood, where she argues the social contract is designed to position women as subject to and dependant upon men. Thus, the social contract is a tool for the dominance of men in society. Similarly, the “liberal individual” conceptualized by a society with a social contract tends to see that individual in economic terms – the ‘economic man’. We see this, for example, in laws that gave men the right to property ownership, and upholds men as the powerful entities in legal and economic institutions. A race-conscious critique holds similar arguments, but looks at how the ‘liberal individual’ or ‘economic man’ envisaged by the social contract is decidedly white. No better example of this was in the USA, where a constitution built on the idea of a social contract nonetheless allowed white men ownership over Black people. Charles Mills (1997), for example, who was inspired by Pateman’s feminist critique, argued that the social contract is in fact a ‘racial contract’. This racial contract, Mills argues, justifies the exploitation of people, lands, and resources of other races. We continue to see this, for example, in debates over Indigenous land ownership in Canada and Australia, where land ownership under the social contract belongs to the ‘crown’ (i.e. white colonizers), whereas from the Indigenous perspective, this land is sovereign and unceded Indigenous land. The race contract fails to acknowledge this. A third critique comes from a care ethics perspective, which holds that the social contract sees civilization as an exchange of mutual benefit, which fails a moral duty to one another. The care ethics perspective holds that the social contract fails the poor and needy who are worthy of economic and physical protections regardless of their claim to money or power. In other words, our interdependence should be more than just of mutual benefit; rather, some of us should expend our time, energy, and economic resources for the care of others, without an expected reciprocal deed. Social contract theory posits that individuals, tacitly or explicitly, agree to abide by certain rules and laws of society. They do so because the alternative is far less appealing. As the examples above show, different philosophers have different conceptions of the social contract. The theory continues to be debated and discussed in contemporary political and moral philosophy, and it can be used to justify both democratic and authoritarian rule. Castiglione, D. (2015). Introduction the Logic of Social Cooperation for Mutual Advantage – The Democratic Contract. Political Studies Review, 13(2), 161–175. D’Agostino, F., Gaus, G., & Thrasher, J. (2021). Contemporary Approaches to the Social Contract. In E. N. Zalta (Ed.), The Stanford Encyclopedia of Philosophy (Winter 2021). Metaphysics Research Lab, Stanford University. Epicurus—Principal Doctrines. (n.d.). Retrieved January 14, 2023, from Gauthier, D. (1987). Morals by Agreement. Clarendon Press. Gough, J. (1938). 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A Theory of Justice: Revised Edition. Belknap Press. Rousseau, J.-J. (1997). Rousseau: “The Social Contract” and Other Later Political Writings. Cambridge University Press. (Original work published 1762) Dozens of controversial political issues divide Americans today. Most of these issues pose important questions about the role and composition of the government—Who should the next president be? How much should the government tax its citizens? What should the government do to prevent gun violence? The answers to these questions are undoubtedly important. But in my view, none of these questions are as important as answering the most fundamental question in politics—why does the government exist in the first place?Social contract theory, as advanced by a diverse array of philosophers including Locke, Hobbes, Rousseau, and Kant, tries to answer this question by arguing that government exists because the people of a given nation voluntarily surrender a portion of their natural freedoms in exchange for extra protection that the government provides.[1] As its name might imply, the relationship between citizens and their government acts as a contract—the government gives us protection and some degree of added well-being, and in exchange we promise to obey the laws they pass. This theory seems logical enough, and it’s certainly popular. But unfortunately, it has significant weaknesses that weaken its ability to provide a coherent theoretical justification for the existence of government.The basic idea at the core of social contract theory—that the relationship between a government and its citizens is analogous to a contract—is fundamentally flawed. First, as the first day of any contract law class would teach you, a legally binding contract is one that is entered into voluntarily by two informed, consenting parties, one of which extends an offer that the other accepts.It should be obvious to everyone reading this, or at least every naturally-born citizen of the United States, that you have never participated in such an exchange with the government. The government never came to my front door, or my hospital room when I was an infant, and asked for my consent to submit to their laws in exchange for whatever protection they offered. Therefore, the claim that our relationship is analogous to that of a contract is seriously dubious. Some social contract theorists address this problem by arguing that citizens give “implicit” or “hypothetical” consent when they take advantage of the protections the government provides. Are we really comfortable with that idea? Apply it to other areas of life where consent is important. Do we really think “hypothetical consent” is as valid as explicit consent?The analogy is further problematic because of another basic concept of contract law—breach of contract. The idea is that when one side of a contract fails to fulfill their obligations, the other party can take action against them and be awarded damages and/or terminate the contract altogether. While there are some limited ways for citizens to take action against government abuses, there is, of course, no lawful way for citizens to “terminate” the social contract, something that would undoubtedly involve rebellion. We might be comfortable with this idea when we consider rebellions against tyrannical governments, like the American Revolution. But the exact same reasoning was explicitly used by the Confederate States to justify their secession.[2]Let me be perfectly clear—I’m not arguing that the government is illegitimate, or that a government that more strictly followed the principles of contract law would be better than our current government. However, I am suggesting that social contract theory is an inadequate theoretical basis for justifying the relationship of the government to its citizens.But if that’s true, where do we go from here? Discarding social contract theory feels like pulling the rug out from under our entire idea of government. After all, the Founding Fathers proclaimed in the Declaration of Independence that governments “derive their just powers from the consent of the governed.”[3]I don’t have an easy or comprehensive answer to that question. However, I lean towards an idea I’ll call the moral justification approach. Society with a government is objectively better than society without government, almost no matter how ineffective or corrupt that government might be. For that reason, government has a moral justification to exist and perpetuate its existence even without the explicit consent of the governed. However, if the government becomes so abusive, or so grossly inept at providing even basic protections, then society can justifiably argue that they would be better off with no government at all. Situations like this, when the government is rampantly abusing basic human rights, justify revolutions that aim to either permanently abolish the government or, more realistically, replace it with a better one.To a certain extent, my description remains vague. I won’t pretend to be able to prescribe specific criteria for every potential issue that could arise from the moral justification approach. But I do think it’s important to have a coherent ideological justification for the “Leviathan” that is our government—a supreme authority with a monopoly on violence that demands you surrender some of your liberties and property in exchange for protection. Social contract theory does not provide that justification. As a library, NLM provides access to scientific literature. Inclusion in an NLM database does not imply endorsement of, or agreement with, the contents by NLM or the National Institutes of Health. Learn more: PMC Disclaimer | PMC Copyright Notice . 2021 Jan 20;3:e20. doi: 10.1017/ehs.2021.4 Keywords: Political philosophy, small-scale societies, social contract, Hobbes, Locke, Rousseau, Darwin Political philosophers have long drawn explicitly or implicitly on claims about the ways in which human behaviour is shaped by interactions within society. These claims have usually been based on introspection, anecdotes or casual empiricism, but recent empirical research has informed a number of early views about human nature. We focus here on five components of such views: (1) what motivates human beings; (2) what constraints our natural and social environments impose upon us; (3) what kind of society emerges as a result; (4) what constitutes a fulfilling life; and (5) what collective solutions can improve the outcome. We examine social contract theory as developed by some early influential political philosophers (Hobbes, Locke and Rousseau), who viewed the social contract as a device to compare the ‘natural’ state of humans with their behaviour in society. We examine their views in the light of recent cross-cultural empirical research in the evolutionary social sciences. We conclude that social contract theorists severely underestimated human behavioural complexity in societies lacking formal institutions. Had these theorists been more informed about the structure and function of social arrangements in small-scale societies, they might have significantly altered their views about the design and enforcement of social contracts. Social media summary: Social contract philosophers overlooked the central role of informal social institutions in governing human behavior. From its earliest beginnings, political and social philosophy has been not only conceptual but also empirical, albeit at a very general level. This is true not only of those usually considered political philosophers (such as Plato, Aristotle, Confucius, Machiavelli, Hobbes, Locke, Voltaire, Montesquieu, Rousseau, Hume and Mill), but also and especially of sociologists, economists, historians and essayists such as Herodotus, Thucydides, Ibn Khaldun, Montaigne, Gibbon, Smith, Malthus, Ricardo, Marshall and Weber, all of whom made contributions that have had a lasting impact on political philosophy, broadly considered. Such writers as these have expressed their opinions about the facts of at least five main matters, namely: What motivates human beings – what makes us think and behave the way we do? What constraints our natural and social environments impose upon us? What kind of society emerges as a result? What is ‘good’ for human beings, in the sense of constituting a fulfilling life, whether or not we are aware of it? What collective solutions might be found to improve the outcome. For the purposes of this paper, we will refer to each set of views about these five matters as ‘a theory of human nature’. Although these views contain inescapable elements of value judgement, they are also grounded in broadly empirical claims about what human beings and their societies are like. While this framing does not necessarily correspond to how political philosophers have expressed themselves, it provides a general conceptual framework that can be empirically evaluated, and it shares core features with frameworks of evolutionary social scientists including Darwin. When Aristotle wrote ‘Man is a political animal’ (Zoon Politikon), did he mean that man is motivated by political aims, or that a life of political action is the only worthwhile life for man? Probably he meant both. However, like many other political philosophers, he developed his views on the basis of generalisations from his own and others’ observations. So did Hobbes, when he claimed that the life of man in the state of nature was ‘solitary, poor, nasty, brutish and short’ (in Leviathan, Part 1, Chapter 13), or Rousseau, when he claimed that ‘man is born free, and he is everywhere in chains’ (in the opening sentence of On the social contract). Our contention in this paper is that it is time to update many of these generalisations from observation in the light of more recent empirical research, beginning with Darwin (1871). We do not aim to provide a systematic, let alone exhaustive, review; instead we select a few illustrative generalisations that have profoundly influenced contemporary academic and public discourse on political philosophy, and for which sufficient research within the evolutionary social sciences exists to assess their empirical validity. In writing thus of ‘generalisations from observation’ we do not mean to imply that political philosophers have been innocent empiricists whose only shortcomings are due to their having lived before the publication of the latest high-quality scientific research. Quite the contrary: many political philosophers have been engaged in consciously partisan, even propagandist projects. Some have been tutors or counsellors to political rulers – most famously Aristotle, who was tutor to the future Alexander the Great, and Thomas Hobbes, who was tutor to the future King Charles II (who later helped shield his former tutor from charges of atheism). Many others, including Ibn Khaldun, Niccolo Machiavelli, John Locke and Adam Smith, have enjoyed enough social proximity to those wielding political power for us to be wary of considering their theories to be free of partisan intent. Note that Machiavelli himself was well aware of this fact, and writes: ‘The prejudice which is entertained against the people arises from this, that any man may speak ill of them openly and fearlessly, even when the government is in their hands; whereas princes are always spoken of with a thousand reserves and a constant eye to consequences’ (Discourses on the first decade of Titus Livius, Book 1, Chapter 57). Arguably one of the strongest arguments for the existence of universities is to make scholars less directly dependent on the favour of rulers whose propagandists they may be tempted to become. Even without personal incentives to argue for specific political arrangements, philosophers have been profoundly influenced by the economic and social circumstances in which they lived, to the point where their taking a certain view on human nature or the nature of society may be at least as fruitfully illuminated by these circumstances as by the evidence available to them at the time. That this is now a truism owes a great deal to the influence of historians of political thought such as Quentin Skinner and the Cambridge School (Skinner, 1969). Our purpose here is in no way to downplay these economic or social influences, nor to indulge in pointless counterfactual speculation about what Aristotle might have argued if only he had had advance access to Nature or Evolutionary Human Sciences. Nevertheless, among the reasons why the works of such political philosophers have had such persuasive force over the centuries has been that they are considered to embody fundamental views about the nature of human beings and their place in society that appeal to diverse readers. Keynes's remark on the last page of The general theory that ‘Practical men who believe themselves to be quite exempt from any intellectual influence, are usually the slaves of some defunct economist’ (Keynes, 1936) can be applied with even greater vigour to defunct political philosophers, who may exert an unacknowledged influence on views about human nature and society that deserve to be openly examined and reviewed. A particularly well known example is the tabula rasa theory of the human mind, which dates back at least to Aristotle's De Anima, but is best known today through the writings of John Locke (1689a). The theory has been sufficiently influential that Steven Pinker devoted an entire book to demolishing it (Pinker, 2002) and both Locke and Pinker are widely cited today in the literature on individual and social learning. It may matter less whether views such as these are accurately attributed to the authors concerned, and still less whether modern readers understand why they were adopted in the first place. Such views can be assessed against later available evidence, even if we accept that the factors that may have contributed to their development and propagation are rarely reducible to empirical conviction alone. We have a specific reason for evaluating select empirical content relevant to matters 1–5 above. These matters correspond to a way of analysing social processes that has been used fruitfully within a number of social sciences, and which we can call equilibrium analysis. It has been most explicitly deployed in economics but is also used in political science, evolutionary anthropology and biology, as well as some parts of quantitative sociology and economic history. Its strength consists in allowing the facts under 1 and 2 to explain the outcomes 3, which can be compared against the standard of evaluation 4. Proposals for improved outcomes 5 then have to be checked for consistency with 1 and 2 and shown to be feasible in spite of the actual tendency of society to produce inferior outcomes 3. Outcomes 3 represent equilibria of the social processes characterised by 1 and 2, and the alternative outcomes 5 have to be possible equilibria as well. The word ‘equilibrium’ is not always used explicitly in such analysis, so it is worth defining explicitly. An equilibrium is a state of society which, given the motivations and constraints of its members, would tend to persist in the absence of some external disturbance. Note that an equilibrium is not necessarily a desirable outcome under any reasonable criterion: indeed perhaps the most famous description of a political equilibrium is George Orwell's horrifying injunction in his novel 1984 to ‘imagine a boot stamping on a human face, forever’. Yet there is an important reason for focusing on equilibria: if we try to implement political solutions that are not equilibria, they will not last. The range of possible political philosophers we might have chosen to cover is vast. For this paper we draw examples from three thinkers (Hobbes, Locke and Rousseau) who developed a ‘social contract’ approach to political philosophy. Our aim here is certainly not to propose a synthetic summary of their philosophical thought, but simply to give our subjective interpretation of an illustrative subset of their ideas about human nature. These three writers articulated with particular clarity a distinction between attributes of human motivation and behaviour in the ‘state of nature’ vs. those that were the products of society with formal institutions. By ‘formal institutions’ we refer to those created by humans to govern human behaviour; they comprise written guidelines (e.g. laws, charters, constitutions) that are enforced by authorities. This distinction between humans in the state of nature and in society with formal institutions was radically novel in the history of political thought, but has remained an important part of our thinking about human behaviour ever since. Whether we look at ancient thinkers such as Aristotle or Confucius, or more modern ones such as Marsilius of Padua or Machiavelli, before the writings of the social contract theorists humans were unimaginable as abstracted from society. For Confucius, for example, humans are inextricably embedded in a network of social relationships, which define who they are as well as their duties and moral obligations. For Machiavelli, ever-changing relations of power, submission and subjugation between individuals are among the defining features of life in society. For both of them, there would be no point in thinking about humans in isolation, independently of the social and political context in which they live. This means that, in examining the work of these thinkers, we will distinguish under item 3 between the kind of society which emerges when human beings interact in a state of nature, and that which emerges in a modern society with formal institutions. These thinkers drew wildly different conclusions from this contrast; for Hobbes, the state of nature involved such fear and potential for violence that even the institutions of a repressive monarchy were much to be preferred, while for Rousseau the institutions of modern society (and notably those of private property) were responsible for far greater evils than any in a state of nature. Neither author explicitly used the notion of equilibrium that we described above, but for both of them the underlying idea is there. Societies are the outcome of social processes resulting from the interaction of people who have certain characteristics; if we want to work for better outcomes we should forget about trying to change human nature, and concentrate instead on changing the conditions under which people interact. This should clarify why we focus on empirical evidence from small-scale societies. Compared with industrialised and agricultural societies, small-scale societies – including foragers, horticulturalists, pastoralists and subsistence-level societies with mixed economies (e.g. forager–horticulturalists) – possess more similar social and ecological features that were typical of more than 99% of the evolutionary history of the genus Homo (prior to the first agricultural revolution around 12,000 years ago). These features include: subsistence lifestyle characterised by minimal technology; limited energy availability (a high physical activity level relative to consumption); limited material wealth; high fertility; frequent resource pooling within residential settlements; and an absence of formal institutions. We acknowledge that the term ‘small-scale societies’ is inadequate to capture the range of variation in production technology, social organisation and hierarchy, demography, responses to external social processes and other features characterising both contemporary and past human societies (Reyes-Garcia et al., 2017). Indeed, under certain ecological conditions, foragers are known to have been relatively sedentary, produced food surpluses which were stored, been territorial, owned property and had marked status differentials (Rowley-Conwy, 2001). Nevertheless, for our present purposes we can say that small-scale societies illustrate one kind of equilibrium in which humans may find themselves, and large-scale societies illustrate another. The contrast between the two may illuminate what difference formal institutions can make. However, whereas evidence from large-scale modern societies is everywhere around us, evidence from small-scale societies has been much less easily available, and thus lends itself more to inaccurate characterisation. We have two reasons for focusing on small-scale societies, and neither depends on claiming that the thinkers we examine believed that a state of nature had ever really existed. The first reason, which is not really controversial, is that these are the only observable instances available of human societies that function without formal institutions, which is the closest set of real conditions to those which the social contract theorists had in mind. The second, which is much more controversial, is that many of the conditions of small-scale societies have persisted since the origin of modern humans, constituting a physical and social environment against which humans have been evolving under the influence of both natural and cultural selection. To the extent that there are common features of psychology and behaviour in such societies, they may come closest to constituting a ‘human nature’ that can be compared with the human nature to which our various philosophers appealed. Finally, a word about Darwin. As is well known, Darwin avoided addressing questions about human evolution in The origin of species, not because he believed them to be unimportant, but because he was afraid that controversy over the social, political and theological implications of his theory of evolution by natural selection might impede the scientific evaluation of the theory itself. By the time he came to write The descent of man he had realised that such controversy was unavoidable and was better addressed directly. In the latter book he made very clear that natural selection had shaped not only human morphology but also human behaviour, and the subsequent century and a half has shown what a powerful insight that was. For much of the twentieth century, unfortunately, explanations of human behaviour in terms of environmental factors were considered substitutes for rather than complements to explanations drawing on natural selection, and this undoubtedly explains why political philosophy has not made more explicit use of the insights of the Darwinian approach. It is now much easier to accept that humans are flexible learners who are massively influenced by signals from their natural and social environments because natural selection has shaped them to be this way. The work of Robert Boyd and Peter Richerson has been particularly influential in this regard – see Boyd and Richerson (1985) and Richerson and Boyd (2005). In this spirit we hope that an attempt to draw out some implications for political philosophy from empirical research in evolutionary social science, in particular cross-cultural human behavioural variation, is an appropriate tribute to The descent of man on the 150th anniversary of its publication. We structure this paper as follows. In Section 2, we set out the views of the three social contract theorists about the five main matters of political philosophy we outlined above. In Section 3 we summarise the ways in which recent research in evolutionary social science can cast light on these views. Section 4 answers some general questions about how the circumstances of the state of nature should be interpreted. In Section 5 we briefly summarise and conclude. While there are many differences between the social contract theorists, we begin by focusing on their commonalities. This can best be characterised as an attempt to establish the principles of legitimate political power through a rational and materialistic approach. Importantly for our purpose, these philosophers explicitly base their system on some description of human nature, as emphasised in the concept of a ‘state of nature’. The root of their philosophical system is in a sense anthropological. The purpose of this exercise is to seek a basis of power that is less debatable than divine law, and less arbitrary than the simple use of force. To do so these theorists turn to the legal concept of contractual agreement based on mutual consent. The idea of the contract is clearly borrowed from law. From the Latin ‘societas’, the word ‘society’ originally refers to a contract whereby individuals pool property and activities, and in which the partners undertake to share any loss or benefit that may arise from this association. The fundamental shared concepts of social contract theorists include the state of nature, and two types of contracts, those of association and of government: The state of nature – the state of humans having no other bond between them than their common quality of being human. Different thinkers hold different views as to what other qualities were associated with this state; although all thought of humans in this state as ‘equal’ in some respects, the character of this equality differed substantially. The ‘contract of association’ – the contract of individuals among themselves when they decide to unite to confer on a single person or an assembly the task of making decisions in such a way that these decisions are considered to be the will of all. The ‘government contract’ – the voluntary surrender of some individual liberty and the promise to obey the government. Social contract theories differ according to their conception of the state of nature and their analysis of the two contracts. Importantly, they all share a similar methodology: start from a description of human nature (as perceived to be real, or abstractly in the state of nature), and derive from these foundations, in a deductive way, the principles of legitimate political power. All were inspired by natural sciences and mathematics (in particular Hobbes by geometry and Rousseau by chemistry). In addition to a conscious distancing from scholasticism and from religious justifications for political legitimacy, social contract theories also broke with ancient philosophy and in particular with Aristotle's Politics, which established social organisation on moral principles and on natural rights that existed prior to formal societal institutions. For these social contract theorists it is not true that ‘man is by nature a political animal’. Man becomes social only by his own will. The city-state does not exist by nature, but results from a convention. We now look at ways in which the details of the social contract theories varied between thinkers. Instead of starting from a (claimed) revealed truth, Hobbes bases his social contract theory on his conception of human nature, in one of the first attempts at the secularisation of political thought. In Leviathan (published in 1651), Hobbes advances several claims: man in the state of nature is fundamentally fearful and driven by passions; individuals are fundamentally equal; for fear of violence, they will willingly abdicate their right of nature in favour of an absolute sovereign who will guarantee public peace using the power of repression at his disposal. In terms of the five matters we outline above, the Hobbesian view of human nature is that: Humans in the state of nature seek only to ensure their own preservation, by all means, and are driven by passion, particularly for power (‘in the first place, I put for a general inclination of all mankind a perpetual and restless desire of power after power, that ceases only in death’; chap. XI). Moreover, men are essentially equal in strength and capacity (‘Nature hath made men so equal in the faculties of body and mind as that, though there be found one man sometimes manifestly stronger in body or of quicker mind than another, yet when all is reckoned together the difference between man and man is not so considerable as that one man can thereupon claim to himself any benefit to which another may not pretend as well as he. For as to the strength of body, the weakest has strength enough to kill the strongest, either by secret machination or by confederacy with others that are in the same danger with himself’; chap. XIII). The main constraint on individuals is the capacity of others to inflict violence on them. In contrast, they are not constrained in their ability to inflict violence on others. Hobbes considers that natural law (jus naturale) gives the individual absolute freedom to do whatever his power allows him to do: ‘Every man has a right to everything’. Natural law depends on the strengths of each individual. Any idea of justice will only appear with formal laws: there is no justice to the state of nature (contrary to what Locke argues, for example). The result is a situation of chaos with rife potential for civil war. Permanent insecurity and danger characterise this natural state, which Hobbes sees as a state approximating that of war. No one is ever really at peace in this situation, and in order to defend oneself, it is necessary to attack others. The state of nature is therefore characterised by struggles ‘of each against each’. In these circumstances, the overwhelming need of human beings is security. The means to achieve security can only come in the form of law – not ‘natural law’, which is a source of freedom rather than constraint, but social law. Consequently, it is inevitable that each individual decides to enter into a contract with each of the others, in order to abdicate part of their power in favour of a common authority with absolute power, the State, or Leviathan, described as a ‘mortal god’. Only a strong authority is capable of guaranteeing everyone the preservation of their lives and property. Put another way, government, according to Hobbes, must flow from a covenant of each person to each other – not to the sovereign – in which all cede to the sovereign their right to govern themselves and their freedom so that the will of the sovereign brings the wills of all individuals to one single will. It is important to note that the contract is at this stage ‘horizontal’, not ‘vertical’ (the contract of association). ‘The only way to erect such a common power, as may be able to defend them from the invasion of foreigners, and the injuries of one another, and thereby to secure them in such sort as that by their own industry and by the fruits of the Earth they may nourish themselves and live contentedly, is to confer all their power and strength upon one man, or upon one assembly of men, that may reduce all their wills, by plurality of voices, unto one will’ (chap. XVII). Hobbes explains that the state can take three forms, depending on how power is exercised: by a single man in a monarchy, by the assembly of citizens in a democracy, or by a small circle in an aristocracy (chap. XIX). He is a strong advocate of absolute monarchy, considering this type of regime to be the most suitable for ensuring peace and security for the people (II, 19). The two characteristics of the government contract according to Hobbes are: the fact that submission must be total; and the fact that the ruler himself is not bound by the contract (i.e. his power is absolute). Total submission on the one hand and absolute power on the other are the sine qua non conditions of a civil state – that is, a state of peace. Indeed, the mere possibility of recourse against the sovereign would lead to a return to the struggle of each against each. Locke shares with Hobbes his contractual doctrine of the state, and also his determination to found this doctrine in opposition to a previously dominant theory of the divine right of kings revealed by scripture. In the First treatise he spends most of his time demolishing the Patriarcha of Sir Robert Filmer, which was one of the most influential texts defending such a doctrine of scriptural revelation. Nevertheless, Locke develops the argument in a very different way from Hobbes. Starting from very different premises about the state of nature, he reaches very different political principles (Two treatises of government, Locke, 1689b). This reminds us that the content of these philosophers’ claims about the state of nature plays a crucial role in justifying their normative conclusions. For Locke, the state of nature is a state of harmony and reasonable freedom. He describes it in Chapter 2 of the Second Treatise as: a state of perfect freedom to order their actions, and dispose of their possessions and persons as they think fit, within the bounds of the law of Nature, without asking leave or depending upon the will of any other man. A state also of equality, wherein all the power and jurisdiction is reciprocal, no one having more than another, there being nothing more evident than that creatures of the same species and rank, promiscuously born to all the same advantages of Nature, and the use of the same faculties, should also be equal one amongst another, without subordination or subjection, unless the lord and master of them all should, by any manifest declaration of his will, set one above another, and confer on him, by an evident and clear appointment, an undoubted right to dominion and sovereignty. Individuals in the state of nature enjoy two powers and a fundamental right: the power to ensure their own conservation; the power to punish anyone who threatens their life; and the fundamental right of ownership limited to what is necessary for its conservation. Contrary to Hobbes, Locke recognises natural rights: he argues that people have rights, such as the right to life, liberty and property, that have a foundation independent of the laws of any particular society. This is not, of course, an empirical disagreement with Hobbes in the ordinary sense of the term, but rather a difference of values. Nevertheless, Locke's view of the state of nature as harmonious (an empirical claim) helps to make the claim that people in it enjoy certain rights less contrived than it would be in a state of total fear such as that described by Hobbes. The right to property contains two interesting elements. First there is a version of a labour theory of value: Whatsoever, then, he removes out of the state that Nature hath provided and left it in, he hath mixed his labour with it, and joined to it something that is his own, and thereby makes it his property (Second Treatise, Chapter V, paragraph 27). The second is a requirement, which acts as a qualification to the labour theory of value, that the act of appropriation should not harm the opportunities for appropriation by others: For this ‘labour’ being the unquestionable property of the labourer, no man but he can have a right to what that is once joined to, at least where there is enough, and as good left in common for others (Second Treatise, Chapter V, paragraph 26). In terms of the five matters we outline above, Locke's view of human nature is as follows: Locke's view of the fundamental motivation of humans is different from that of Hobbes in that the passion for power is less dominant. People are more bourgeois and less martial than for Hobbes (Macpherson, 1962) – violence is more the product of the wish to steal others’ resources than to exercise domination over them (nevertheless, for a reminder of Locke's awareness of the recent history of political and especially religious violence, see Tully (1980, 1993)). Locke also differs from Hobbes in that he considers natural law to constrain human behaviour in the state of nature. Although this represents a difference of values and not of simple fact, it is a claim that makes more sense in a relatively peaceful state of nature than it would in a Hobbesian struggle of all against all. Although the state of nature is indeed more harmonious than it is for Hobbes, it is still regularly threatened by insecurity. It also contains enough material abundance that the right to appropriate nature by mixing it with one's labour does not regularly prevent their being ‘enough and as good left in common for others’. Security is necessary to achieve peace and prosperity, which are fundamental goods for Locke (he places more value than Hobbes on prosperity). Individuals therefore enter into civil status by a contract of association (mutual consent) and a contract of conditional submission. Unlike for Hobbes this submission is only conditional. Locke believes that no legitimate (i.e. freely consented) government can be an absolute government. No one would be foolish enough to consent to give up all their rights, because then the state of society would be worse than the state of nature (the same idea will be found in Rousseau). Locke's idea is that, in civil states, the rule is that of the

distribution of that wealth. Because, in general, resources are much more equally distributed in small-scale compared with larger-scale societies, material poverty in small-scale societies may be experienced very differently from poverty in societies with significant storable and heritable wealth and wealth inequalities (Jaeggi et al., 2020). Wealth can be defined in various ways: (1) material, (2) relational and (3) embodied (Borgerhoff Mulder et al., 2009). The relative paucity of owned, defensible and transmittable material wealth among many hunter–gatherers (exceptions notwithstanding, e.g. Ames, 2003; Rowley-Conwy, 2001) entails comparatively minimal wealth inequality. Relative egalitarianism in material resource access limits the formation of rigid, pronounced gradients in health and longevity along status lines that reliably emerge among humans and other primates (e.g. Kondo et al., 2009; Marmot et al., 1991; Sapolsky, 2005). Minimal wealth inequality diminishes subjective experience of deprivation and subordination and associated adverse health consequences, including chronic psychosocial stress and depression (see Snyder-Mackler et al., 2020 for an overview). Foragers who have been able to intensify resource exploitation and produce storable food surpluses which are then defended and transmitted are exceptions that prove the rule: alongside stable material wealth differentials we observe among some foragers status-graded variation in well-being, including the existence of slavery. Status hierarchies do indeed exist across diverse small-scale societies, but rather than resulting simply from variation in material wealth, they are often linked to relational wealth (i.e. social ties in marriage, food-sharing and other cooperative networks) and embodied wealth (i.e. physical and cognitive abilities, such as strength and knowledge/skill, underlying variation in food production and reproductive success). At the same time, as Hobbes intimated, inhabitants of small-scale societies often face undesirable physical conditions including harsh and unpredictable environments (e.g. extreme temperatures, omnipresent insects), predation, diverse infectious diseases (a major cause of mortality), and food and water shortages. Nevertheless, Hobbes's erroneous characterisation of life in small-scale societies overlooks numerous enjoyable leisure activities within such societies, including storytelling (Schniter et al., 2018; Smith et al., 2017), music-making, singing and dancing (Mehr et al., 2019), sport (Trumble et al., 2012) and communal beer-drinking (Hooper et al., 2013), that have long been posited to play central roles in socialisation, information exchange and/or entertainment, but whose form and function are only recently being understood empirically. Beer drinking is of course a product of post-agricultural societies, but consumption of psychoactive plant substances – which may have been used in various collective activities (e.g. ceremonies, recreation, labour) – may have a longer history that predates the Neolithic (Hagen & Tushingham, 2019). Notwithstanding the recurring potential for violence in small-scale societies, Hobbes's use of the word 'brutish' also seems quite inaccurate to describe the subtle mechanisms deployed in many such societies to manage conflict. Precisely because overt conflict or its threat was frequent, we would expect strong selective pressure to evolve strategies for managing conflict. This point has been explored in particular detail in de Waal (2017). Boehm (1999) documents the many ways in which the relatively egalitarian social structure of some hunter–gatherers both requires and facilitates respect for individual autonomy. Potentially powerful individuals cannot easily dominate, and if they try they face countervailing pressure from coalitions of others (see Gavrilets, 2012, for a theoretical application). Violence is often shunned in daily life (e.g. Tacey & Riboli, 2014); its sanctioned use is generally reserved for extreme cases (e.g. punishing murderers). Excessive use of violence for punishing norm violators often entails moral outrage (Mathew, 2017) and reputational and other costs to overly aggressive norm enforcers. Wrangham (2019) provides an overview of the strategic use of aggression to discipline individuals who are excessively prone to exercise what he calls 'reactive aggression' (i.e. a response to a threat or frustrating event, with the goal being only to remove the provoking stimulus), and suggests that this human tendency played a major role in our physical and psychological evolution. Among Aka hunter–gatherers of the Central African Republic, individuals 'cite physical or verbal fighting as one of the worst things one individual can do to another, along with not sharing, stealing food or husbands/wives, and sorcery' (Hess et al., 2010: 338–339). In many small-scale societies a common response to conflict is for one or multiple involved parties to disperse to another residential group (for short or longer durations, as Rousseau intimated). Relocation costs are relatively low in the absence of formal property rights. When norms are violated within the group, punishment commonly takes the form of criticism, shaming, ridicule, ostracism, mocking or even joking rather than violence (Wiessner, 2005). Third-party mediation is another common strategy for peacefully resolving disputes, and conflict resolution is a common function of leaders in small-scale societies (see Garfield et al., 2020 and references therein). Other tactics for minimising aggression include arranging marriages for young girls (e.g. Shostak, 1981), which can serve to reduce male competition and unite in-laws. Maintaining group cohesion and reducing tensions can also be accomplished through trance healing dances and 'fireside chats' (Wiessner, 2014). Even families involved in lethal conflicts can avoid the temptation of enacting revenge, e.g. by portraying the incident as a random and isolated incident (e.g. owing to intoxication), or by regarding an aggressor as mentally unstable and not deserving of further attention. Finally, Hobbes's characterisation of life in the state of nature as 'short' was in important respects mistaken. It is true that recorded human life expectancy has increased linearly by three months per year over the past 160 years (Oeppen & Vaupel, 2002), with improvements in sanitation, nutrition and public health accounting for much of this change. Life expectancy at birth is projected to continue increasing in industrialised countries worldwide through 2030, largely owing to enhanced longevity at older ages (Kontis et al., 2017). By 2030 female life expectancy may exceed 90 years. Such high survival rates have probably never occurred before in human history. Nevertheless, despite their lower life expectancies, hunter–gatherer and horticultural populations with limited access to medical care and sanitation are likely to reach middle age and older adulthood if they survive early childhood (Gurven & Kaplan, 2007). High infant and child mortality yields a life expectancy at birth of 21–37 years for hunter–gatherer populations, but conditional on survival to age 15 years, the modal age of death for hunter–gatherers, horticulturalists and even eighteenth-century Europeans ranges from 68 to 78 years. Human longevity is therefore not simply an artefact of improved living conditions. Moreover, many chronic causes of morbidity and prevalent causes of mortality in industrialised populations (e.g. cardiovascular disease, diabetes, obesity, hypertension, also known as 'diseases of civilisation') are rare or absent in small-scale societies (e.g. Gurven et al., 2012; Kaplan et al., 2017). This apparent paucity of non-communicable disease is not a result of short lifespan. Rather, various features of lifestyle such as lean and high-fibre diets free of processed foods, high physical activity levels, minimal smoking and other behaviours are protective factors common to many small-scale societies. It might seem as though empirical evidence would hardly be relevant to the question of the good life for humans, which is essentially a matter of value judgements. However, this ignores the fact that evidence from small-scale societies has yielded some valuable insights into aspects of daily life that are reliably associated with mental health, or with various forms of psychological distress including depression. A philosophical theory of the good life for humans is not just a set of value judgements, but also a (loosely) empirical set of hypotheses about the kinds of activities that lead to humans' judging their lives to be worthwhile, and that lead to human flourishing. Of course, some philosophers have accorded greater weight than others to the judgements of individuals, who are not necessarily considered the best judges of what is good for them. Some (like Nietzsche) have even attacked the idea that contentment with one's life is a desirable state, considering that various forms of striving are far more noble ideals even if these bring stress and disappointment in their wake. Nevertheless, it is worth noting that evidence has accumulated in recent years in favour of the view that, although there is much between- and within-societal variation in what individuals consider to be worthwhile forms of living, the majority of individuals derive important benefits from intrinsically social aspects of their lives – their networks of family, friends, colleagues and neighbours. Even if some material circumstances are capable of causing great unhappiness – physical illness is a frequent cause of depression, for example – above a certain level of material comfort the contribution of material prosperity to human fulfilment is relatively unimportant. Psychologists have recognised that human interdependence shapes the self-concept (Markus & Kitayama, 1991) such that social identity is an essential component of self-concept ('identify fusion'). Ingroup fusion indeed predicts costly self-sacrifice in economic experiments among subsistence and market-integrated populations (Purzycki & Lang, 2019). Given the importance in terms of biological fitness of inter-individual transfers of resources and assistance in every phase of the human life course (Lee, 2014), it is likely that human psychological well-being responds to the nature and quantity of those transfers (Stieglitz et al., 2014). In particular, deviations of resource transfers from expectations can affect psychological well-being. Resource flows can be disrupted for various reasons; one principal source of disruptions is the inability to provide support for others owing to disability, illness, or some other permanent or temporary shock. Given that downward resource transfers from older to younger individuals are expected in small-scale societies and that illness and disability become increasingly prevalent with age, the inability to provide and share expected resources can be a principal driver of reduced psychological well-being among aging adults. Limited evidence from small-scale societies (Stieglitz et al., 2014, 2015) suggests that risk of depression increases with age, as health, functional ability and productivity decline, and is not characterised by a 'mid-life crisis' as in modern societies (Blanchflower & Oswald, 2008). Space constraints prevent us in this paper from reviewing the massive literature on political arrangements in small-scale societies, as well as from distinguishing as much as we would have liked between more or less segmented forager societies (see Garfield et al., 2019, for a substantial review of one key dimension of political arrangements, namely political leadership). However, we can make some observations about the extent to which particular informal social institutions have proven robust in the face of individual incentives to disrupt them. The work of Boehm (1999) cited above suggested that the relatively egalitarian distribution of both material resources and power in certain small-scale societies was the product not of an absence of competitive instincts among their inhabitants but rather an equilibrium in which those competitive instincts were kept in check by the countervailing power of others. Furthermore, a talent for mobilising such countervailing power was suggested by Boehm to be one of the major adaptive innovations of the human social order under certain conditions. To the extent that that countervailing power was successful, its mobilisation could be considered a significant public good. At least in egalitarian hunter–gatherers, in contrast to the views of Machiavelli and Hobbes, influence is exercised largely through prestige rather than dominance, a distinction emphasised by Henrich and Gil-White (2001). Small-scale societies have also shown considerable ingenuity in mobilising their members to provide other kinds of public goods, including participation in hunting and defence operations (Boyd, 2017). Such participation is clearly strategic and responsive to the fitness benefits of collective action. In particular, as emphasised by Glowacki et al. (2020), 'warfare is a strategy by which coalitions of males cooperate to acquire and defend resources necessary for reproduction. This strategy is not the result of a single "instinct" for war, but is instead an emergent property resulting from evolved psychological mechanisms (such as xenophobia and parochial altruism). These mechanisms are sensitive to ecological and social conditions, such that the prevalence and patterns of warfare vary according to subsistence strategies, military technology, cultural institutions, and political and economic relations'. It is notable that the small-scale societies that have implemented collective action in this manner have all done so in spite of the absence of formal legal institutions, which suggests that the social contract theorists considerably underestimated the ability of human societies to find informal solutions to the problems generated by the state of nature. Among the chief mechanisms for achieving collective action has been the establishment and enforcement of norms (Boyd, 2017) for policing perceived anti-social behaviour. In small-scale and other societies, theft is perceived as immoral, worthy of firm punishment and damaging to one's reputation (Barrett et al., 2016). This would of course have been less surprising to earlier thinkers – Confucius, for example, laid particular emphasis on righteousness, namely on maintaining integrity in the face of temptation. Relatedly, language in small-scale societies reveals a broadly similar set of normative concerns. A lexical study of 'human attribute concepts' (i.e. traits ascribable to humans) in 12 isolated languages spanning most habitable world regions outside of Europe found that jealousy and crookedness are relatively ubiquitous human traits (Saucier et al., 2014). Similarly, honesty and dishonesty are among the most salient cross-cultural indicators of good and bad people, respectively, based on free-list responses capturing local attitudes (Purzycki et al., 2018). Marital infidelity is regarded harshly cross-culturally (Scelza et al., 2020), and is the most commonly cited reason for divorce (Betzig, 1989). Given the importance of inter-dependence for survival throughout human history, it has been hypothesised that the emotion of shame evolved to avoid or minimise social costs incurred from committing immoral acts (Sznycer et al., 2018). Along with such norms there is widespread acceptance of the idea that virtuous people should be sought out as social partners, and that anti-social individuals should be shunned. 'Lab in the field' economic experiments among Hadza hunter–gatherers of Tanzania and Tsimane forager–horticulturalists of Bolivia indicate that, despite substantial residential mobility, cooperators are preferentially connected to other cooperators in social networks (Smith et al., 2018; Stieglitz et al., 2017). In Bwa Mawego, Dominica, men with better altruistic reputations form more same-sex reciprocal labour partnerships than men with poorer reputations (Macfarlan et al., 2012). Finally, the Hadza appear to agree on which traits constitute moral character (i.e. being a hard worker, generosity and honesty) but disagree on which specific camp mates actually exhibit these traits (Smith & Apicella, 2019), suggesting plasticity in individual dispositions depending on context. In addition to providing public goods and policing anti-social behaviour, individuals in small-scale societies also engage in other kinds of collective activity of a kind that can be described as rituals, the difference being that in rituals the activity is itself constitutive of the collective benefit being provided, rather than merely being instrumental in its provision as is the case for public goods. Although the social contract theorists did not attach much if any importance to ritual, thinkers as diverse as Confucius, Ibn Khaldun (1377) and Durkheim (1915) have argued that rituals promote group cohesion in various ways, including ensuring commitment to collective goals, acquiescence to group traditions (e.g. moral codes, social obligations, institutions) and deference to authority figures. More recent empirical research confirms this. In the Tyvan Republic of southern Siberia, ethnic Tyvans who regularly engage in cairn rites (e.g. making offerings to local spirits by burning incense and leaving money, food or tobacco) are perceived as more trustworthy than ethnic Tyvans, Christian Tyvans and Christian Russians who do not perform such rites, suggesting that ritual increases bonds between practitioners (Purzycki & Arakchaa, 2013). In Mauritius, participation in painful rituals (e.g. dragging heavy objects attached by hooks to the skin for hours) is associated with greater anonymous charitable donations and more inclusive social group identification (Xygalatas et al., 2013). In southern India, those who partake in collective ritual (e.g. monthly temple worship) are more likely to report between them supportive relationships (e.g. receiving advice or loans) compared with those who refrain from ritual; importantly, ritual participants are also able to maintain supportive relationships with non-participants (Power, 2018). Ritual participants are also perceived as more devout, generous, better advisors and having good character compared with non-participants (Power, 2017a), and are more likely to act in ways that benefit others (Power, 2017b). Together, these recent empirical case studies tend to support Confucius' proposal that ritual enhances social cohesion, in part by curbing anti-social behaviour and promoting cooperation. Overall, we can consider that the collective solutions to the challenges that humans encounter fall into two broad categories. The first category consists of those in which the societies informally mobilise the efforts of their members to provide various public goods, including in the form of coordinated defence against or attack of external competitors, or internal dispute management. The second consists of various collective activities whose nature is performative: the action is itself partly constitutive of the benefit and is not merely instrumentally useful. Of course, some kinds of activity (including the collective exercise of violence) may come to acquire a performative character through its repetition over time. There is a good deal of variation between theorists considered here (and some creative ambiguity) with respect to whether they believed the state of nature to be a real state that had ever existed, or merely a rhetorical device to contrast the actual human condition with what we might have been like without formal institutions. Locke took some trouble (at the end of Chapter 2 of the Second treatise, for example) to defend the view that it had once really existed. Likewise, Hobbes writes in Chapter 13 of Leviathan that 'during the time men live without a common Power to keep them all in awe, they are in that condition which is called Warre; and such a warre, as is of every man, against every man'; he uses the present tense, not the conditional. In the following section he is then very explicit: It may peradventure be thought, there was never such a time, nor condition of warre as this; and I believe it was never generally so, over all the world: but there are many places, where they live so now. For the savage people in many places of America, except the government of small Families, the concord whereof dependeth on naturall lust, have no government at all; and live at this day in that brutish manner, as I said before. Nevertheless, in his arguments Hobbes does not draw on any historical description, but rather on his abstract reflections about the natural equality of men in terms of physical strength and cunning, which leads to 'diffidence', by which he means a natural fear of each other. In terms of the way in which modern game-theorists use equilibrium analysis, we can think of Locke as considering the state of nature to be an actual outcome of social arrangements under some real conditions, while Hobbes mainly considered it an 'out-of-equilibrium' state, the credible threat of which was enough to persuade rational individuals to grant legitimacy to the sovereign. Rousseau's view is harder to characterise, since he repeatedly uses ambiguous language. For instance, in Chapter 6 of Book 1 of The social contract, he writes 'I assume that men reach a point where the obstacles to their preservation in a state of nature prove greater than the strength each man has to preserve himself in that state … the only way in which they can preserve themselves is by uniting their separate powers'. He is clearly describing a social process, not an exercise in reflection. On the other hand, he uses the present rather than the past tense and writes 'I assume' ('Je suppose' in the original French) in a way that suggests at least some tentativeness about whether such a process actually occurred. In a passage from the Discourse he even writes 'Let us begin then by setting facts aside, as they do not affect the question'. However, Rousseau's later descriptions of the origins of the Roman republic (in Chapter 4 of Book 4) also suggest he believed that his notion of the social contract, even if idealised, captures some real features of how at least some societies had historically been constituted. For all three of our social contract theorists, then, it appears that they hedged their bets about the historical accuracy of the state of nature to which they appealed in their theories, but were inclined to believe that if the evidence were available it would have supported their description. Once again it is not easy to find an unambiguous answer to this question. Hobbes famously used the term 'solitary', and Rousseau describes human nature as 'entirely complete and solitary' ('un tout parfait et solitaire'). Locke does not use the term, and his description of the state of nature does not seem to indicate solitude at all, since men are constantly fighting over resources. Nevertheless, all three theorists seemed to believe that there was a solid foundation to human reason that existed prior to any process of socialisation, and to which appeal could be made to judge the conditions under which human beings were to organise their collective lives. From the studies of small-scale societies that we have reviewed, it is clear that many specific assumptions that these thinkers made about life without formal institutions were wrong. More importantly, it may be the whole perspective of the social contract that should be questioned. Indeed, the philosophical basis of social contract theory is to judge political institutions as legitimate only if they pass the (hypothetical) test of being unanimously approved by agents under some specific circumstances (the role of the state of nature being to describe these initial circumstances). In these accounts, unanimous consent has to be given by human beings acting in an independent, rational and to some degree solipsistic way. This intellectual construction, which puts emphasis on formal institutions and on an individualistic, society-free perspective, seems at odds with what we have learned from the evolutionary social sciences including anthropology. First, formal institutions are certainly not the only way to regulate human behaviour: social norms and many other coordinating behaviours exist without formal institutions. Second, everywhere, individuals are interdependent and embedded in a network of complex social relations which shape psychology. Acknowledging this invites us to revisit the notion of contract among solipsistic individuals populating the state of nature, even if it is used as a rhetorical device. Taking a broad overview of the accumulated evidence from small-scale societies about the questions that preoccupied the political philosophers whose views we have examined, it is hard not to be struck by the extent to which they underestimated human behavioural complexity in societies that lack formal institutions. Philosophers were not the only thinkers to have such biases: the scientific community as a whole, persuaded of the virtues of codified knowledge and practice in modern social organisation, has often been surprised over many decades by what communities of social organisms (both humans and non-humans) can achieve without formal institutions. It seems therefore that the deployment of the social contract as a device for philosophical reflection, despite its major value in clarifying what can and should be expected of political institutions, has come at a cost – namely that of underestimating and perhaps undervaluing the resilience and subtlety of human behaviour in societies that do not have the formal institutions on which we have come unthinkingly to rely. The notion of a state of nature is largely absent from the works of contemporary thinkers of the social contract, perhaps because of the inherent weakness or the poor empirical foundations of this concept. For example, John Rawls (1971) keeps the notion of a form of consent/social contract as the foundation of the legitimacy of political institutions, but the state of nature has been replaced by the much more abstract notion of an 'original position'. He writes in the first chapter of A theory of justice that he wants to propose 'a theory of justice that generalises and carries to a higher level of abstraction the traditional conception of the social contract. The compact of society is replaced by an initial situation that incorporates certain procedural constraints on arguments designed to lead to an original agreement on principles of justice'. The state of nature has also disappeared from the works of contemporary thinkers who have sought to revisit the concept of social contract as an explicit unanimous agreement among rational individuals. For example, Brian Skyrms (1996) argues for a weaker notion of agreement, as implicitly emerging from the dynamic interactions of the members of society. Here too the notion of 'state of nature' has disappeared (even if in Skyrms's arguments, the initial conditions may sometimes play an important role, the interpretation is very different). Although Charles Darwin did not claim to be an expert on small-scale societies, and did not found an explicit political theory on his empirical convictions about the nature of life in such societies, there is abundant evidence that he was profoundly aware of the intensely social nature of life prior to the agricultural and industrial revolutions, and thought this had been so for long enough to shape human behaviour through natural selection. In one remarkable passage in The descent of man he speculates as follows: When two tribes of primeval man, living in the same country, came into competition, if (other circumstances being equal) the one tribe included a great number of courageous, sympathetic and faithful members, who were always ready to warn each other of danger, to aid and defend each other, this tribe would succeed better and conquer the other. Selfish and contentious people will not cohere and without coherence nothing can be effected. A tribe rich in the above qualities would spread and be victorious over other tribes … thus the social and moral qualities would tend slowly to advance and be diffused throughout the world. (Darwin, 1871, part I, pp. 162–163) When we reflect on the profound sentence that concludes The descent of man ('Man still bears in his bodily frame the indelible stamp of his lowly origin' (Darwin, 1871, part II, p. 405), we should be in no doubt that Darwin intended the 'indelible stamp' to apply also to human behaviour. However, anyone tempted to read it as a gloomy statement about our animal nature and the way it pollutes our social behaviour, might fruitfully compare it with the closing paragraph of the The origin of species, where he writes: There is grandeur in this view of life, with its several powers, having been originally breathed into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved. (Darwin, 1859, pp. 459–460). Modern evolutionary social science has affirmed most emphatically the existence of 'endless forms most beautiful' of non-human and human behaviour in small-scale societies, and we believe political philosophy can only be enriched by taking these explicitly into account. This project is the result of an invitation by Sergey Gavrilets, Pete Richerson and Frans de Waal to contribute to a special issue to mark the 150th anniversary of the publication of Charles Darwin's The descent of man. We are grateful to the editors for this invitation, to Sergey Gavrilets and two anonymous referees, and to Ingela Alger, Jean-Baptiste André, Nicolas Baumard, John Broome, Zach Garfield, Mark Greenberg, Alissa MacMillan, Catherine Mohlo and Manvir Singh for comments on an earlier draft. All authors contributed equally to the paper. All three authors acknowledge IAST funding from the French National Research Agency under the Investments for the Future (Investissements d'Avenir) program, grant ANR-17-EURE-0010. All authors declare no conflicts of interest. No data are reported in this paper. Alger, I., Hooper, P., Cox, D., Stieglitz, J., & Kaplan, H. (2020). Paternal provisioning results from ecological change. PNAS, 117, 10746.–. 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