

# HUME AND THE PHILOSOPHY OF LAW

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Hume never devoted a single book or treatise to the law. But he comments extensively on the topic throughout his works.<sup>1</sup> We cannot identify any Humean school among modern legal philosophers, nor place him squarely within one of the major traditions of legal philosophy. However, when we examine the relevant texts, we can see that Hume made a major contribution to the development of legal thought, one that has not been fully recognized. Hume offers an account of the nature and origins of our sense of justice, which he sees as rooted in our awareness of the utility it provides to society. He also emphasizes the importance of the rule of law to a modern commercial society and analyzes the development of English law towards a system that is stable and predictable. His influential *History of England* helped turn legal thinkers away from the fruitless search for some “original contract” between king and people and encouraged them to attend to the more complicated process of evolution that created the constitution of his day. And he provides the first systematic analysis of the law as a system of conventions to which people adhere in order to reap the benefits of social cooperation.

## Hume’s acquaintance with the law

We cannot say for certain the extent of Hume’s background in the law, since he never underwent any systematic program of training. But we know that this background was significant. Hume’s father Joseph Home was a lawyer, who trained at the University of Utrecht, at that time the center of learning for Roman law, on which the Scottish legal system was based. Joseph died when Hume was 2. As a young man, Hume, in need of a profession, was pushed towards a career in law by his family, who felt that his “studious disposition,” “sobriety,” and “industry” ideally suited him to it. It was in any case a natural choice for the son of an advocate. At that time an aspiring young lawyer trained by attending trials and other court sessions, and, most importantly, read on his own. Hume tried to work through the standard textbooks and may have sat in on the Courts of Session in Edinburgh. But the teen-ager ultimately found that he had at the time “an unsurmountable aversion to everything but the pursuits of philosophy and general learning,” and he abandoned his legal studies. (L 1: 1.)

Despite this early failure, Hume remained closely connected to the world of the law. His circle of intimates included two of the country’s most brilliant legal minds. Hume’s cousin Henry Home was a prominent lawyer, raised to the bench in 1752 as Lord Kames. Fifteen years older

than Hume, Kames was a man of broad philosophical interests. Kames mentored his younger cousin and helped promote his ideas. Hume was also close to Alexander Wedderburn, who defended Hume from charges of heresy before the Scottish kirk, and who ultimately became Britain's Lord Chancellor.

Hume was fluent enough with the law to be appointed a Judge Advocate in the military during the Seven Years War, charged with presiding over courts martial. And he spent several years as Librarian to the Faculty of Advocates at Edinburgh, a job that made him superintendent to Scotland's finest library. The library was established in the late seventeenth century to provide lawyers with access to both legal and non-legal texts, and Hume spent his time reading deeply in the library's collection. It was during this period that he did the bulk of his research for his *History of England*.

### The virtue of justice and the emergence of law

Any discussion of Hume's contribution to the philosophy of law must begin with his original, and controversial, account of justice. Hume uses the term "justice" in slightly different ways at different points in his writing, but he uses it primarily to describe the trait of character that disposes us to respect the society's rules regarding the possession and transfer of property. Hume aims to provide an explanation of how such rules arise, and why we are generally, even if not invariably, disposed to obey them. Hume's account is original in several respects. First of all, he thinks that the rules of justice, which later become formalized as laws, emerge gradually, as the result of a slow evolution. He thus rejects the notion of an "original contract" between the people and their governors that establishes a society's legal framework. Second, he thinks these rules emerge to protect property, and that remains their primary purpose. Third, he denies that justice is an innate feature of the mind. To use Hume's (somewhat idiosyncratic) terminology, it is an artificial rather than a natural virtue. Finally, he thinks that people's allegiance to the legal system comes from their awareness of the utility of this system, rather than a fear of sanctions.

To understand Hume's originality, we can contrast his account of justice with that of one of his most influential predecessors, Thomas Hobbes. Hobbes begins by imagining people living in a state of nature, where everyone is alone and fends for him or herself. However, these solitary creatures realize they are better off living together under a system of rules, with people empowered to enforce them, and so they agree to form a society. Certain people are designated as magistrates, and they lay down laws which the people are obliged to obey. While Hobbes' account was itself original and highly controversial, the idea that the laws owed their origin to a contract between ruler and people was axiomatic among the Whigs of Hume's day, and it had carried currency since the middle ages. For Hume, the contract accounts ignore the crucial, intermediate stages of social development. He insists that the basic rules governing people's behavior precede the appearance of magistrates and of formal sanctions.

Hume thinks that, because people are inherently social, there was never any stage in our history where we lived as isolated individuals. Instead, we first lived together in family units. But our experience with such small units convinced us that we benefit from cooperation, and so we naturally tended to expand our social circle outwards, into ever-larger groups. Hume speculates on how a legal system might emerge from these early forms of society. As people moved from family units to larger social groups, they saw that life in such larger groups had distinct benefits. But it also created the potential for conflict. People thus realized that it was necessary for continued coexistence that there be divisions between "mine" and "yours" – or in other words an idea of property. They established rules for exchange and transfer. The rules of property thus emerge

before any formal laws, and before anyone is given any powers of enforcement. Hume thinks that a society can reach a stage of considerable complexity, and can remain quite stable, without a formal system of laws or government. People follow the rules of property due to their fear of social disapproval, and due to their awareness that these rules are necessary for maintaining a society that delivers benefits to everyone in it.

At some point, rulers and magistrates emerge, and the laws become formalized and enforced. Hume is not willing to say definitively how this happens, and he provides different explanations for how it might. He speculates that magistrates might emerge as divisions in wealth become more pronounced, increasing the temptation for lawlessness. Or it might be that they establish themselves as the society faces the threat of foreign attack. In any case, once people have experienced strong rulers who can enforce the rules of property, they see the benefits of having such rulers. As time goes on, these rulers appoint lesser magistrates to administer justice, and they begin to refine and revise the established rules. A legal system has emerged.

In asserting that legal systems emerge from the need to protect property, Hume departs from predecessors such as Hobbes, Pufendorf, and Hutcheson, who all argue that societies need laws at least partly due to people's propensity to do harm to one another. Hume is aware that the scope of the law extends significantly beyond the governance of property relationships. His essays and *History of England* discusses a wide variety of constitutional, criminal, and civil laws. But he thinks that it is the law's ability to guarantee the stable possession and transference of property that explains both its emergence and its on-going legitimacy. Our sense of justice is rooted in our understanding that a system of stable property rules is in our long-term best interest.

Though Hume is more or less alone among philosophers in focusing exclusively on property as the foundation of law, he offers only the most cursory defense of his view. He says that there is little reason to rob people of life or security, since we gain nothing by doing so, and so there is no reason to think that when people first established the rules of justice, they were motivated by the desire for personal safety. Property, by contrast, is ever in short supply and is easily hijacked, and so it makes sense to believe that people have always needed rules to secure it.

Thomas Reid, among others, remarked critically on Hume's property-based account of justice, and few historians would be convinced by Hume's argument in its defense. No one would deny that what he calls "avidity" – the desire for material possessions – has long been an important source of social disorder. However, even a cursory glance at the historical record seems to give ample evidence for the thesis that humans are willing to engage in violence for a wide variety of reasons, beyond the mere hope of material gain. Scholars have yet to give a fully satisfactory account of why Hume thinks the rules of justice are rooted entirely in our desire to protect our property.

Hume also departs from his predecessors in arguing that justice is, as he puts it, an artificial, rather than a natural virtue. This too earned him criticism from Reid and others, not all of whom understood clearly what he meant. It is not surprising that Hume's view was seen as provocative. Johnson's *Dictionary* gives one definition of "artificial" as "fictitious," and Hume's description of virtue as artificial would have reminded some readers of Bernard Mandeville, who notoriously argues that society's moral and legal rules are mere artifices devised by cunning politicians to manipulate people into behaving in the ways they deem desirable. When Hume says that justice is artificial, he does not mean that the rules of property are arbitrary, nor does he think they may be traced to specific artificers, who have deliberately developed them to serve their own ends. By claiming justice is an artificial virtue, he means to say rather that it is the product of education, socialization, and reflection. We can contrast his view with the position of Francis Hutcheson, who believes that the rules of justice originate from an innate principle

of the mind – what Hume calls “a simple original instinct in the human breast” – and that such an instinct can explain our allegiance to them.

Hume does not think, as Hobbes does, that people act entirely out of self-interest. He recognizes that we have naturally benevolent motives. Indeed, he thinks that, ultimately, people’s “kind affections, taken together . . . over-balance all the selfish” ones (T 3.2.2.5; SBN 487). However, he thinks that our natural benevolence cannot be the basis of our sense of justice, and thus Hutcheson’s account cannot be right, for two reasons. First of all, Hume does not think that a system that relied on our natural benevolence would be stable enough to act as the basis for a lasting social order. For Hume, the problem is not that we lack benevolence. It is that, in individual cases, we are easily overwhelmed by self-interest, or by a force at least as potent: partial sympathy for those closest to us. Both of these emotions would lead us into behavior that is destructive to society, were they not tempered by our willingness to follow the more impartial rules of justice.

Second, and more importantly, even when benevolence is strong enough to cause us to act, it does not invariably lead us in the direction that justice demands. Hume notes something that few others before him had seen clearly: that benevolence and justice are in fact quite distinct. The acts we esteem as just are very often neither intrinsically praiseworthy in themselves, nor immediately beneficial to the parties involved. If we had only our instinctive benevolence to guide us, the society’s rules would look very different than they in fact do – if it were able to implement a stable system of rules at all. Benevolence causes us to make judgments based on individual cases, whereas the benefits of a system of justice come from the functioning of the system as a whole. Indeed, many just judgments look distinctly unpraiseworthy when viewed merely through the lens of benevolence. As Hume says:

If we examine all the questions, that come before any tribunal of justice, we shall find, that, considering each case apart, it would as often be an instance of humanity to decide contrary to the laws of justice as conformable them. Judges take from a poor man to give to a rich; they bestow on the dissolute the labour of the industrious; and put into the hands of the vicious the means of harming both themselves and others. The whole scheme, however, of law and justice is advantageous to the society.

(T 3.3.1.12; SBN 579)

Hume thinks that we can explain people’s obedience to the law by attending to the advantageousness of the legal system as a whole. While we do not follow the laws from any natural desire to do good, neither do we act merely from a fear of the sanctions attached to their violation. This could not be the motive, since the rules of justice pre-exist the presence of formal sanctions. We also do not follow them because of any promise, explicit or tacit, to do so. Hume insists that our willingness to keep our promises has the same source as our fidelity to the law. He argues that our on-going obedience is rooted in our understanding of the utility provided by the overall system of rules. He says:

Justice arises from . . . a sense of common interest; which . . . each man feels in his own breast, which he remarks in his fellows, and which carries him, in concurrence with others into a general plan or system of actions, which tends to public utility.

(EPM, App. 3.7; SBN 306)

Hume thinks that the utility of the legal system is obvious enough, so that anyone who reflects on the rules of society easily sees the advantages that come from following them. But he does not think that it is necessary for each and every person to reflect on the law and understand its utility in order to acquire a sense of obedience to it. Our sense of justice is in practice created by

an on-going process of socialization. Hume asserts that we are turned into law-abiding members of society by the work of our parents and our teachers in instilling good behavior, by the moral exhortations of politicians urging us to be good citizens, and ultimately by the force of habit.

### General laws and Britain's legal development

Hume's *Treatise* provides a highly abstract and speculative discussion of how legal rules emerge in a society. In his essays and his *History of England*, however, he offers a different sort of analysis – one that draws on concrete examples and cases. Despite this more practical focus, he remains faithful to the basic ideas he develops in the *Treatise*. In his later works, Hume focuses on the conditions necessary to establish what we now call the rule of law. He does not use this phrase, though he does speak of “a government of laws” – which has a similar meaning, and which he invariably contrasts with a government “of men.” Hume identifies both the key features of such a government of laws and the conditions necessary for its establishment, and he argues that, once established, it has broad-reaching impacts on society as a whole. For Hume, the key features of a government of laws are, first of all, that it places limits on the discretionary power of magistrates, and, second, that it applies the laws to the magistrates themselves.

Hume argues there are two stages in a society's legal development: an early, imperfect one, in which the magistrates govern using broad discretionary powers, and a more advanced state in which they enforce, and are restricted by, what he calls “general laws.” Hume tells us in the *Treatise* that a stable property regime depends on “general rules, which must extend to the whole society, and be inflexible either by spite or favour” (T 3.2.3.3; SBN 502). As he explains in his later writings, this means that monarchs or central authorities must watch over what he calls “the lesser magistrates” to ensure that these magistrates are not exercising discretion in their judgments. He says it is a virtue of the British government of his day that it must “maintain a watchful jealousy over the magistrates, to remove all discretionary powers, and to secure every one's life and fortune by general and inflexible laws” (E 96; cf. EPM Appendix 3.6; SBN 305). And he says it is characteristic of “all civilized nations” that they restrict such judicial discretion (EPM Appendix 3.10; SBN 308). Hume also emphasizes the importance of applying the laws to the magistrates themselves. He says that “a scene of oppression and slavery” is the inevitable result of any legal system “where the people alone are restrained by the authority of the magistrates, and the magistrates are not restrained by any law or statute” (E 118).

Hume paints a dire picture of societies where a government of laws has not been established. He calls such societies “barbarous,” and says that the inadequate legal regime “debases the people, and for ever prevents all improvements.” Because property is not secure, the economy cannot flourish. The arts and sciences also stagnate. However, the situation is not entirely hopeless. A gradual process can take place, driven by chance events and by talented monarchs, whereby the society can progress to a state of “civilization.” Once an adequate system of laws begins to emerge, the economy, science, and the arts will begin to improve as well, and this in turn will further stimulate legal development. This is precisely what he thinks happened, over the course of several centuries, in England.

Hume's analysis of England's legal history begins with the Norman conquest. He dismisses the views of certain “common law” thinkers of his era, who insisted that English law was rooted in the immemorial past and that it was the task of the jurist to learn and preserve these timeless traditions. For Hume, the Normans founded English law as we know it when they seized all of the nation's land by right of conquest, and then bequeathed it to the most powerful aristocrats among the conquerors. These barons held the land as vassals of the king and granted land to their own followers on the same terms – thus inaugurating the feudal system.

Hume speaks in scathing terms of this feudal system, which he sees as dangerously unstable and unproductive. First of all, the lords retained the right to administer justice on their estates, ensuring that judgments were determined by discretion rather than general laws. Second, he thinks there was constant struggle between the king and his “unruly barons.” The outcome depended on the talents of the individual monarch. A strong king could rule as a tyrant, while a weak one allowed rebellion and lawlessness among the nobles to thrive.

Hume argues that it is only during the Tudor era that this conflict was resolved decisively, on the side of the monarchs. The Tudor rulers were able “to pull down those disorderly and licentious tyrants [i.e. the aristocracy] . . . and to establish [a] regular execution of the laws” (H 2: 525). This triumph, though it benefited the people, came at a cost, however. The crown established itself through the use of royal prerogative, which, though it served a useful purpose, nevertheless brought a danger that soon became apparent, that of royal oppression. The nation required a second stage, when the monarchs themselves were brought under the control of law. Hume praises the Long Parliament for finally abolishing the Star Chamber, an act which he thinks effectively made Britain “a government of laws.” “The parliament justly thought,” he says,

that the king was too eminent a magistrate to be trusted with discretionary power, which he might so easily turn to the destruction of liberty. And in the event it has hitherto been found, that, though some sensible inconveniences arise from the maxim of adhering strictly to law, yet the advantages overbalance them, and should render the English grateful to the memory of their ancestors, who, after repeated contests, at last established that noble, though dangerous, principle.

(H 5: 329–330)

Hume thinks that, after this great breakthrough, England’s legal and political system continued to evolve in the direction of liberty, with the crown’s power further restricted by gradual stages. He speaks warmly of the effects of the Glorious Revolution, which he says was “attended with consequences . . . advantageous to the people.” “By deciding many important questions in favour of liberty,” he concludes, “and still more, by that great precedent of deposing one king, and establishing a new family, it gave such an ascendant to popular principles, as has put the nature of the English constitution beyond all controversy” (H 6: 531).

Hume expresses great admiration for Britain’s modern constitution, which he thinks has achieved a near-ideal balance of liberty and authority – in other words, protections for the rights of citizens alongside effective central authority. However, he thinks that this balance is a fragile one, and events could always tip things too far in one direction or the other. Late in life, he took a decided turn towards pessimism concerning Britain’s political future, believing that popular disorder might necessitate an assertion of strong central power in order to keep the peace.

### **Hume and the critique of natural law**

Modern debates in the philosophy of law have turned on the distinction between positivist and natural law approaches to the law. While Hume cannot be defined as a legal positivist, Bentham and other positivist thinkers drew on his arguments in their effort to demolish the natural law tradition. Natural law theory was the dominant mode of legal thought during Hume’s era, and his contribution to its eclipse should not go unnoticed.

As I have said, Hume thinks that justice is in one sense natural, and he uses the term “laws of nature” to describe the basic rules of property, which govern “the stability of possession” and “its transference by consent.” These rules arise in any human group that has reached a certain



level of size and complexity, and they address needs that are universal to creatures like us. Despite his use of the term “laws of nature,” however, Hume departs dramatically, and quite deliberately, from conventional conceptions of what such laws were. His views on the law are consistent with his general philosophical project, which involves explaining human phenomena by appeal to principles of human nature, and without recourse to the supernatural. Thus he rejects any suggestion that the laws might be the product of divine will, or might serve some larger providential purpose. He also denies that the proper exercise of human reason leads us towards the good, as Aquinas believes. Hume famously declares something no natural law thinker in the Aquinian tradition could endorse, that “it is not contrary to reason to prefer the destruction of the entire world to the scratching of one’s little finger” (T 2.3.3.6; SBN 157).

I have said that for Hume, our obedience to the laws may be traced to their utility, and it is perhaps not surprising that Hume exercised an influence on Jeremy Bentham, who is sometimes seen as the founder of legal positivism. In his *Fragment on Government*, published in 1776, Bentham says that when he read David Hume’s *Treatise of Human Nature* (which appeared in 1739), he felt “as if the scales had fallen from my eyes.” It was from Hume, he claimed, that he “learned to see that utility was the test and measure of all virtue” (Bentham Burns, J. H. and Hart 1977: 440–441). However, there is reason to believe that, in this text, Bentham over-states Hume’s actual impact on him. There are no references to Hume in Bentham’s surviving correspondence of the time, and he directly cites Hume’s idea of utility nowhere else. Bentham seems to have come across appeals to utility and to the greatest happiness in a number of authors he read during his youth, including Helvetius, Beccaria, and Priestley. It would be a mistake to give Hume exclusive credit for inspiring Bentham’s adoption of utility as the measure of all value. And Bentham’s energetic project to reform Britain’s laws, and those of all nations, is foreign to Hume’s conservative temperament. Hume uses the notion of utility primarily as an explanatory one, to provide an account of how the laws in fact emerge. He is willing to praise historical figures such as King Edward I, who reformed England’s laws for the better. But he could never have endorsed a project such as Bentham envisaged, of completing rewriting the existing legal codes of every country, in order to ensure they conformed to the demands of utility.

Even if we determine that, in formulating his notion of utility, Bentham’s debt to Hume is a limited one, the English reformer also attributes to Hume another important insight that became central to positivism’s critique of natural law theory. Bentham credits Hume with first observing

how apt men have been, on questions belonging to any part of the field of Ethics, to shift backwards and forwards, and apparently without their perceiving it, from the question, what has been done, to the question, what ought to be done.

(Bentham and Bowring 1843: 8, 128)

Bentham is referring to the passage in the *Treatise* where Hume argues that moral conclusions can never be derived from non-moral premises (See T 3.1.1.27; SBN 469–470). Natural law theory is, as we have seen, premised on the derivation of normative propositions from facts either about the nature of reality or the nature of human reason. Bentham thinks Hume dispenses with the possibility of any such derivation, and, taking this insight on board, Bentham divides jurisprudence into two separate provinces:

To the province of *Expositor* it belongs to explain what, as he supposes, the Law *is*: to that of the *Censor*, to observe to us what he thinks it *ought to be*. The former, therefore,

is principally occupied in stating, or in inquiring after *facts*: the latter, in discussing *reasons*.

(Bentham Burns, J. H. and Hart 1977: 397)

While Bentham had no qualms about acting as censor, later positivists have placed themselves staunchly in the role of expositor, insisting that they are providing a sociological analysis of the law and its functioning.

Hume also deserves recognition for anticipating another important theme within modern legal positivism: its emphasis on convention. It is a great insight of Hume's that rules for social cooperation can emerge without any explicit agreement among the parties involved, and that people will continue to follow these rules in a stable and predictable way. Though modern legal conventionalism draws its immediate inspiration from the work of Thomas Schelling (1963) and David Lewis (1974), it may nevertheless be seen as broadly Humean in spirit. Gerald Postema has written influentially on both modern legal conventionalism and on Hume's legal theory, and his work makes conventionalism's debt to Hume clear (Postema 1982; Postema 1986).

Modern legal conventionalism begins from the view that the legal system depends on a particular kind of social fact, namely the cooperative behavior of those involved, rather than on some abstract set of principles. Scott Shapiro, for instance, describes legal practice in Humean terms, as a joint activity, the goal of which is the "creation and maintenance of a unified system of rules." Shapiro says that the legal officials are obliged to "mesh" their actions with those of others because they participate in an on-going process of cooperation, "not because of the principles of morality" (Shapiro 2002: 437).

Legal conventionalism has been criticized for its exclusive focus on the law's coordinating function (Green 1999). There has been debate among scholars whether, for his part, Hume sees the law purely in terms of social coordination, or whether he endorses specific normative criteria according to which we may judge different legal systems as better or worse relative to one another. Russell Hardin (2007) offers the most thorough interpretation of Hume as a conventionalist who abjures all normative evaluation. This stands in contrast to the reading of Hume offered by Stewart (1992) and McArthur (2007), who both argue that he puts forward a set of normative criteria that allow him to recommend certain forms of political and legal society over others, not just as more effective forms of social coordination but as preferable on moral grounds. On their reading, Hume is not merely a social scientist who analyzes the conditions under which a society develops legal and political institutions and who seeks to explain why citizens retain an on-going allegiance to these institutions. He is also a committed reformer who wants to promote certain kinds of institutions – specifically those that foster individual freedom and commercial development.

## Conclusion

While philosophers have long acknowledged the importance of Hume's analysis of justice and his critique of the social contract, he is not normally given a place in the canon of major legal philosophers. I have argued that his contributions to the field are significant, and extend beyond what many people recognize today. We can find in his work a pioneering analysis of what we now call the rule of law, as well as anticipations of important themes within modern legal positivism.

## Note

- 1 K. Mackinnon, ed., *Hume and Law* (2012) provides an authoritative collection of article on all aspects of Hume's legal thought. Other important works include Harrison (1981), Haakonssen (1981), and



Postema (1986). My monograph *David Hume's Political Theory: Law, Commerce, and the Constitution of Government* (2007) discusses Hume's distinction between barbarous and civilized governments, and the role played by the law in the evolution of modern commercial society.

### References

- Bentham, J. and J. Bowring, eds. (1843) *The Works Volume 8 Chrestomathia*, Edinburgh: William Tate.
- , J. H. Burns and H. L. A. Hart, eds. (1977) *A Comment on the Commentaries and a Fragment on Government*, London: University of London Athlone Press.
- Green, L. (1999) "Positivism and Conventionalism," *Canadian Journal of Law and Jurisprudence* 12(1): 35–52.
- Haakonssen, K. (1981) *The Science of a Legislator: The Natural Jurisprudence of David Hume and Adam Smith*, Cambridge: Cambridge University Press.
- Hardin, R. (2007) *David Hume: Moral and Political Theorist*, Oxford: Oxford University Press.
- Harrison, J. (1981) *Hume's Theory of Justice*, Oxford: Clarendon Press.
- Lewis, D. K. (1974) *Convention: A Philosophical Study*, Cambridge, MA: Harvard University Press.
- Mackinnon, K., eds. (2012) *Hume and Law*, London: Routledge.
- McArthur, N. (2007) *David Hume's Political Theory: Law, Commerce, and the Constitution of Government*, Toronto: University of Toronto Press.
- Postema, G. (1982) "Coordination and Convention at the Foundations of Law," *Journal of Legal Studies* 11(1): 165–203.
- . (1986) *Bentham and the Common Law Tradition*, Oxford: Clarendon Press.
- Schelling, T. (1963) *The Strategy of Conflict*, Oxford: Oxford University Press.
- Shapiro, S. (2002) "Law, Plans and Practical Reason," *Legal Theory* 8(4): 387–441.
- Stewart, J. B. (1992) *Opinion and Reform in Hume's Political Philosophy*, Princeton: Princeton University Press.

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