REPLACING GOD WITH BIG DATA: PERSONALIZING COPYRIGHT LAW

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ABSTRACT

Can religious law serve as a source of inspiration for a modern legal system? As all religious legal systems, Jewish law includes statutes that rely on a premise of divine omniscience. By assuming a worldview in which God sees into the human heart, Jewish law can allow for subjective and personalized legal norms that derive from individuals' assessments of value or need. Ostensibly, the centrality of divine omniscience in enabling such laws renders them irrelevant to a secular legal system. This article highlights how, surprisingly, the legal structure of these norms may nonetheless be a fruitful source of inspiration for a modern legal system. The article focuses on the Jewish legal model of personalized copyright, and demonstrates how this model could be applied in modern secular law by replacing the function of the belief in divine omniscience with the use of big data.

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INTRODUCTION

Can ancient religious legal systems serve as a source for legal innovation in a modern field like copyright? In this Article, we answer in the affirmative. One of the distinguishing characteristics of ancient religious systems is the assumption of an omnipresent God overseeing human actions, a feature that seemingly impedes any attempt to transplant its legal structures to a modern secular context. Yet focusing particularly on the significance of divine omniscience yields surprising results in stimulating innovative solutions to the problems of modern law. With respect to copyright, we argue that contemporary technological developments can replace the role originally played by divine omniscience, thereby allowing for the incorporation of legal norms that were heretofore thought to be inapplicable in secular law.

Recent technological advances have enabled the development of big data, enabling humans to oversee record, and process vast quantities of human action.[1] People may now do what they once believed only God could. The idea of an omniscient God is fundamental to the construction and application of any system of religious law. Crucially, the premise of divine omniscience allows for variation in the application of law to different individuals. In some areas, religious law can allow for individuals to choose their own personalized legal standards, based on the assumption that God sees into their hearts and recognizes if they chose appropriately.[2] All this may at first seem entirely irrelevant to modern secular law. Yet the availability of big data has transformed such personalization of norms into a feasible possibility in the context of modern secular law. In fact, big data has the potential to replace the role of divine omniscience, thus opening the door to mining religious law as a source of inspiration for fields in which such personalization may be fruitful.

In this Article, we focus on Jewish law and its treatment of copyright material. In essence, Jewish law has no firm copyright regime.[3] Instead, Jewish law relies upon a personalized regime, which permits individuals who are unwilling to pay for copyrighted material to use it freely, while limiting the consumption of those individuals who would have been willing to pay for such consumption.[4] But how can one distinguish between these two types of people? In a religious system it is sufficient that the individual make an honest assessment of whether she would or would not have purchased the

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[1] See *Fuel of the Future: Data is Giving Rise to a New Economy*, THE ECONOMIST (May 6, 2017), https://www.economist.com/briefing/2017/05/06/data-is-giving-rise-to-a-new-economy, for a discussion regarding the big data revolution and its ramifications.

[2] *See* discussion *infra* Section II.b.

[3] *See* Michael Abraham, *Deceit and Intellectual Property*, TEHUMIN 25, 350-351 (2005).

[4] *See* discussion *infra* Section II.b.

copyrighted material had it not been otherwise available.[5] Relying on the twin assumptions that a God who "sees into the heart"[6] exists and that he will retaliate against those who transgress his laws allows for trust in the individual's assessment without external enforcement of the law.[7] Divine omniscience and omnipotence thus serve as the basis for a personalized model of copyright remuneration. In the contemporary world, big data allows for a near-perfect distinction between the two types of individuals described above, thus providing a secularized basis for adopting personalized copyright law. In this Article, we not only argue that it is possible to consider adopting such a personalized copyright regime, but also that it is normatively desirable, as a personalized copyright regime will maximize social welfare.

Copyright law is a uniquely modern phenomenon that developed in the wake of the invention of the printing press.[8] Copyright is also firmly tethered to the emergence of the nation-state; it emerged during the same period, and copyright durations and regulations are generally instituted and governed by the state.[9] For both these reasons, Jewish law is hardly the first place one might look to for inspiration with respect to copyright law. The Jewish legal system is a system of religious law with ancient roots in the Bible and Talmud.[10] It developed, for the most part, under conditions of the exile of its adherents from the land of Israel, which led them to develop a system of law lacking sovereignty and state-sponsored means of coercion and enforcement.[11]

Indeed, several features of Jewish law suggest that it might not fall under the accepted understanding of a legal system at all. First and foremost, Jewish law is grounded in a divine law, traditionally understood to have been given to Moses by God at Sinai.[12] Moreover, underlying Jewish law is the

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[5] *See id.*

[6] 1 *Samuel* 16:7.

[7] *See* discussion *infra* Section II.b.

[8] JOSEPH LOEWENSTEIN, THE AUTHOR'S DUE: PRINTING AND THE PREHISTORY OF COPYRIGHT 28 (2002); RICHARD ROGERS BOWKER, COPYRIGHT: ITS HISTORY AND ITS LAW 454 (1912).

[9] See Keith Aoki, *(Intellectual) Property and Sovereignty: Notes Toward a Cultural Geography of Authorship,* 48 STAN. L. REV. 1293, 1311-12 (1996), for a discussion of the complicated relationship between intellectual property and the nation-state.

[10] *See* 2 MENACHEM ELON, JEWISH LAW: HISTORY, SOURCES, PRINCIPLES 832-833 (1978).

[11] *Id*. at 265.

[12] Legislative activity is not a necessary feature of the divine. Rémi Brague has pointed out that while law for the Judeo-Christian traditions is one of the characteristics of the divine, in most ancient eastern civilizations, the divine realm had no relationship to the juridical. See RÉMI BRAGUE, THE LAW OF GOD: THE PHILOSOPHICAL HISTORY OF AN IDEA 14 (2007). See CHRISTINE HAYES, WHAT'S DIVINE ABOUT DIVINE LAW? EARLY PERSPECTIVES 124 (2015), for a recent treatment of the meanings of the divinity of law in antiquity.

assumption that an omniscient God renders judgments, and enforcement of those judgments is not restricted to the remedies imposed by human beings.[13] Some measures of enforcement are reserved for the omnipotent God, who may punish those who cannot be punished by the community.[14] Jewish law thus seems to be a peculiar system, distinct from modern systems in three aspects of the law: legislative, judicial and executive.[15] Moreover, Jewish law categorizes all law into two categories – legal obligations between people ("between man and his fellow") and religious mandates guiding the ritual sphere ("between man and God") – that exist side by side and are governed by the same principles and rules.[16] Civil law and ritual law are closely intertwined and ruled by the same assumptions about obligation and transgression, sin and atonement.[17]

Despite the absence of Jewish political sovereignty for nearly two millennia, Jewish communities from east to west developed a comprehensive legal system governing much of their social, commercial, and ritual lives.[18] As a vibrant and active legal system, Jewish law merits exploration and comparison with modern legal doctrines.[19] In the case of copyright law in particular, Jewish law has dealt with the problem of copyright since the dawn of print, contending with many of the same issues that concern the jurisprudence of modern copyright law.[20]

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[13] MISHNAH, *Bava Kamma* 6:4; BABYLONIAN TALMUD, *Bava Kamma* 55b-56a.

[14] See generally Shoval Shafat, The Interface of Divine and Human Punishment in Rabbinic Thought (2011) (Ph.D. dissertation, Ben Gurion University), for a discussion of divine punishment as a result of limitations to implementing human justice.

[15] *See* Elliot Dorff, *Judaism as a Religious Legal System,* 29 HASTINGS L.J. 1331, 1333 (1978).

[16] Early scholars of the academic research of Jewish law hotly disputed whether it is possible to distinguish between the laws of interpersonal relationships and the laws of the ritual sphere. *See generally* Isaac Englard, *Research in Jewish Law: Its Nature and Function*, *in* MODERN RESEARCH IN JEWISH LAW 21 (Bernard S. Jackson ed., 1980); Menachem Elon, *More About Research into Jewish Law*, *in* MODERN RESEARCH IN JEWISH LAW 66 (Bernard S. Jackson ed., 1980).

[17] *See* CHAIM N. SAIMAN, HALAKHAH: THE RABBINIC IDEA OF LAW 124-140 (2018).

[18] *See* 1 MENACHEM ELON, JEWISH LAW: HISTORY, SOURCES, PRINCIPLES 35-39, 59-64 (Bernard Auerbach & Melvin J. Sykes trans., 1994).

[19] Indeed, Jewish law continues to be regarded as binding among religiously observant Jews throughout the world to this day, and many ultra-Orthodox Jews hold primary allegiance to Jewish law before the secular systems under which they live. *See* Menachem Friedman & Samuel Heilman, *Religious Fundamentalism and Religious Jews: The Case of the Haredim, in* FUNDAMENTALISMS OBSERVED 197, 213-19 (Martin E. Marty & R. Scott Appleby eds., 1991).

[20] See NEIL W. NETANEL, FROM MAIMONIDES TO MICROSOFT: THE JEWISH LAW OF COPYRIGHT SINCE THE BIRTH OF PRINT (2016), for a comprehensive survey of Jewish copyright law.

In this Article, we highlight a unique aspect of Jewish copyright law that is related to the religious foundations of the Jewish legal system and, specifically, the idea of divine omniscience. We explain the difficulties encountered by rabbinic jurists in attempting to regulate copyright within their communities and show how they resolved these difficulties by turning to personalized, subjective standards in demanding compensation for use of creative license. Rather than setting a complete ban over use of creative materials produced by others, rabbinic decisors have argued that one must only refrain from copying if one would have potentially purchased the copied product.[21] Thus, these decisors suggest that the decision whether to copy material is to a large extent a personalized decision that differs from one individual to another.[22] Leaving the decision of recompensing for use of copyrighted material in the hands of the individual is offset by the presumption of divine omniscience, which suggests that God follows the individual's decision and can determine whether it is true or false.[23]

We then go on to argue that this seemingly exceptional model of personalized standards may in fact have important implications for contemporary law and could potentially inspire a practical solution to one of the central problems of copyright law. While religious law bases its personalized standards on the internalized sense of divine omniscience,[24] this linkage may be decoupled and refashioned to suit the contemporary needs of secular law. We argue that the role of divine omniscience in religious law may be replaced by the use of big data in determining the application of personalized standards of copyright, as a recent study has suggested.[25] Similar to divine omniscience, judicious use of big data may serve as a check on individuals' valuation of their use of copyrighted material.[26] Personalized standards of copyright thus should not be restricted to religious legal systems, but rather may be fruitfully implemented in modern, secular legal systems as well.

Section I of this Article discusses the use of personalized, subjective standards in Jewish law and how they relate to the principle of divine omniscience. Section II explores the rulings of Jewish decisors grappling with the problem of copyright in the early modern period and showcases the solution of personalized law. Section III lays out how personalizing copyright could be applied in the context of modern law, arguing that the role of divine

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[21] *See* discussion *infra* Section II.b.

[22] *See id*.

[23] *See id.*

[24] *See* discussion *infra* Section I.

[25] Adi Libson & Gideon Parchomovsky, *Toward the Personalization of Copyright Law*, 86 U. CHI. L. REV. 527, 528-29 (2019).

[26] *See* discussion infra Section III.b.

omniscience in the religious legal system may be replaced with the use of big data in contemporary law.

I. PERSONALIZATION IN JEWISH LAW

One of the fundamental characteristics of all legal systems is their aspiration to universality.[27] Law generally treats people in an objective or impersonal manner that provides for determinacy and predictability.[28] It is the nature of law to create a ruling that is generally appropriate for the majority but may nonetheless cause harm to individuals in specific cases.[29] This phenomenon is quite nearly inescapable, for it is in the essence of a legal norm that it attempts to do justice with the majority of the scenarios it includes while inevitably causing some degree of harm in a small number of cases.

Jewish law is no exception to this rule. Jewish legal texts, harking back to the Bible and the Talmud, emphasize that justice should be blind and that the law should be impartial and universal.[30] Yet, despite broad application of these principles, as well as significant rhetorical support, Jewish law also includes several mechanisms of amending law to suit the needs of individuals. Some of these strategies are well-known from other systems of law, such as the laws of equity[31] and judicial discretion.[32] A third method

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[27] See Kent Greenawalt, *The Generality of Law*, *in* LAW AND OBJECTIVITY 141, 141-63 (1992), for a discussion of the importance of law's general nature.

[28] *See* BENJAMIN N. CARDOZO, THE NATURE OF THE JUDICIAL PROCESS 112 (1921); H.L.A. Hart, *Laws, Commands, and Orders*, *in* THE CONCEPT OF LAW 18, 18-25 (3d ed. 2012).

[29] *See, e.g.*, CARDOZO, *supra* note 28, at 112. *See also* Hart, *supra* note 28, at 18-25.

[30] *See, e.g.*, *Leviticus* 19:15; *Deuteronomy* 1:17; *Deuteronomy* 16:19. See also Haim Shapira, *"For the Judgment is God's": Human Judgment and Divine Justice in the Hebrew Bible and in Jewish Tradition,* 27 J. L. & RELIGION 273 (2011), for a discussion of Talmudic sources. *See generally* CHAYA T. HALBERSTAM, LAW AND TRUTH IN BIBLICAL AND RABBINIC LITERATURE (2010); CHRISTINE HAYES, WHAT'S DIVINE ABOUT DIVINE LAW? EARLY PERSPECTIVES (2015).

[31] *See* MOSHE SILBERG, TALMUDIC LAW AND THE MODERN STATE 93-95 (Marvin S. Wiener ed., Ben Zion Bosker trans., The Burning Bush Press) (1973). *See generally* AARON KIRSCHENBAUM, EQUITY IN JEWISH LAW: HALAKHIC PERSPECTIVES IN LAW (1991); AARON KIRSCHENBAUM, EQUITY IN JEWISH LAW: BEYOND EQUITY (1991) (describing the ways in which equity balances formalism in the judicial, interpretive, and legislative spheres). Much of the scholarly discussion of equity in Jewish law has centered on the Maimonidean conception of equity and resulted in a conference and volume on this subject. *See generally* ON LAW AND EQUITY IN MAIMONIDEAN JURISPRUDENCE (Hanina Ben-Menahem & Berachyahu Lifshitz eds., 2004).

[32] See generally HANINA BEN-MENAHEM, JUDICIAL DEVIATION IN TALMUDIC LAW: GOVERNED BY MEN, NOT BY RULES (1991), for a detailed discussion of this mechanism. Ben-Menahem argues that Talmudic law granted substantial liberty to individual judges, thereby

distinguishing Jewish law is its reliance upon knowledge that is accessible only to the individual subject.[33] In several cases, Talmudic law challenges the determination of law by legal experts and according to objective legal standards, instead turning to individuals' knowledge of their bodily and mental states to determine the law.[34]

Thus, for example, early Jewish purity law was characterized by the formation of a depersonalized "science" of impurity, dictating the need for a rabbinic expert who can navigate that science.[35] In later sources, however, an entirely novel concept of bodily sensation developed, in effect uprooting the entire earlier system of impurity based on rabbinic expertise.[36] This concept introduced the legal significance of an individual's self-knowledge of his or her body.[37] The later rabbis of the Talmud regarded this knowledge as paramount and gave it precedence over their own expertise, thus relinquishing some of their own power to determine the law.[38]

In this vein, in the case of vulnerable agents, such as a labouring woman or a sick person, the Talmudic jurists allowed for individual knowledge to trump rabbinic assessments. With respect to the labouring woman, rabbinic sources introduce the concept of "need" as challenging the formal restrictions of Sabbath law.[39] By acknowledging the priority of the woman's inner, emotional needs over the objective "facts," the rabbis ultimately grant a woman the autonomy to determine what ruling is appropriate for her.[40] Similarly, the rabbis discuss the case of an ill person whose life might be endangered by fasting on the Day of Atonement (Yom Kippur).[41] The early ruling codified in the Mishnah explicitly relied upon the knowledge of experts to determine whether the patient should violate the fast or not.[42] By contrast, however, later sages rejected the early reliance upon expertise by

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constituting a principle of "the rule of men" as an alternative to the rule of law. *Id.* at 5-18, 80-83.

[33] *See* AYELET HOFFMANN LIBSON, LAW AND SELF-KNOWLEDGE IN THE TALMUD 66-67 (2018).

[34] *Id.* at 93.

[35] *See* CHARLOTTE ELISHEVA FONROBERT, MENSTRUAL PURITY: RABBINIC AND CHRISTIAN RECONSTRUCTIONS OF BIBLICAL GENDER 108 (2000).

[36] *See* HOFFMANN LIBSON, *supra* note 33, at 69.

[37] *See id.* at 70.

[38] *See id.* at 65.

[39] *See* BABYLONIAN TALMUD, *Shabbat* 128b-129b.

[40] *See* HOFFMANN LIBSON, *supra* note 33, at 125.

[41] *See* BABYLONIAN TALMUD, *Yoma* 83a-83b.

[42] MISHNAH, *Yoma* 8:5 ("A sick person—they feed him according to experts, and if there are no experts present, they feed him according to himself, until he says 'enough.'").

invoking a patient's self-knowledge as the determining legal factor.[43]

Finally, early rabbinic sources permit a wife to initiate divorce solely on the basis of objective, verifiable evidence, such as repulsive physical conditions developed by the husband.[44] Later rabbinic sources, however, validate emotional and psychological needs as the basis for a wife extricating herself from an unwanted marriage.[45] This development highlights the autonomy acquired by reliance upon self-knowledge.

In all of these cases, legal standards begin as objective, general standards of law that are put in the hands of legal experts and apply to each individual equally. Over time, and for a variety of reasons, the law is personalized, and different standards emerge for different individuals. In each of these cases, the law is determined to a large extent by the personal testimony of individuals about their own experiences or needs.

While it may seem counterintuitive for the law to progress in this manner,[46] Jewish law was able to develop in this way due to its theological

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[43] *See* Ayelet Hoffmann Libson, *"The Heart Knows its Own Bitterness": Authority, Self and the Origins of Patient Autonomy in Early Jewish Law,* 56 AM. J. LEGAL HIST. 303, 325 (2016).

[44] MISHNAH, *Ketubot* 7:10.

[45] *See* BABYLONIAN TALMUD, *Ketubot* 63b; SHLOMO RISKIN, WOMEN AND JEWISH DIVORCE: THE REBELLIOUS WIFE, THE AGUNAH, AND THE RIGHT OF WOMEN TO INITIATE DIVORCE IN JEWISH LAW, A HALAKHIC SOLUTION 42 (1989). *See also* Avishalom Westreich, *Divorce on Demand: The History, Dogmatics and Hermeneutics of the Wife's Right to Divorce in Jewish Law,* 62 J. JEWISH STUD. 340, 347 (2011); Ayelet Hoffmann Libson, *Grounds for Divorce as Values in Rabbinic Law*, 5 OXFORD J.L. RELIGION 510, 524 (2016).

[46] Scholars of legal systems have demonstrated that the ambition for law to be stable, determinate, and universal pushes legal systems toward standardization and objectification. As Lawrence Friedman has noted, "living rules of law will move toward objectivity as part of their life-cycle." LAWRENCE M. FRIEDMAN, THE LEGAL SYSTEM: A SOCIAL SCIENCE PERSPECTIVE 293 (1975). Whereas an early statute may simply specify that employers maintain a "safe" place for workers, later developments will explicate that vague concept and specify that a workplace is "safe" only if it has a sprinkler system, windows of a certain kind and size, a fire-escape, etc. The development of law tends toward standardization and quantification, thereby attempting to limit the role of judicial discretion. The more the law is standardized, quantified, objectified, the more it lends itself to mechanical application or use, and thus contributes to the goal of rendering law objective, determinate, and universal. *See* Lawrence M. Friedman, *On Legal Development,* 24 RUTGERS L. REV. 11, 38 (1969); LEOPOLD POSPISIL, ANTHROPOLOGY OF LAW: A COMPARATIVE THEORY 128, 191 (1974). Other scholars have argued that legal systems evolve from "primitive" to "complex," and therefore later strata of the law place greater stress on inner states of mind. *See* 1 DAVID DAUBE, THE DEED AND THE DOER IN THE BIBLE: DAVID DAUBE'S GIFFORD LECTURES 33-34 (2008). One of the explanations for this tendency is that legal systems in their early stages have neither the means nor the authority to investigate subjective considerations, and therefore cling to the more formal, objective standards. At later stages, when courts have been accepted as the preferred method of maintaining justice, the judiciary is able to take into account subjective factors in

premise of divine omniscience: like any religious system, Jewish law assumes a God who is all-knowing and ever-watchful.[47] Because religious adherents have a constant internal awareness of God watching over them, the law rests on the assumption that they will not lie about crucial indicators.[48] Each adherent's inner conscience will guide her to determine the correct standards for herself, thus serving as the most efficient form of determining the law.[49]

In sum, contrary to the prevalent view of religious law as controlled by authoritative legal decisors, close examination of several legal statutes from within Jewish law reveals that even its first iterations in antiquity developed nascent ideas of legal standards that may be personalized and tailored to the specific circumstances of its adherents.

II. THE PROBLEM OF COPYRIGHT IN JEWISH LAW

The Jewish tradition of personal legal standards profoundly influenced the development of copyright law.[50] In contrast to the legal arenas discussed in the previous section, the problem of copyright is a relatively new one, emerging only after the advent of print, and thus the discussion of copyright in Jewish law arose in the early modern and modern periods.[51] Lacking the foundational texts of rabbinic tradition concerning the specific problems of copyright law, Jewish decisors struggled to determine the grounds for prohibiting copyright infringement, yet nonetheless clearly drew on earlier notions of personalized law present within the Jewish legal tradition.[52]

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determining the law.

[47] *See* RÉMI BRAGUE, THE LAW OF GOD: THE PHILOSOPHICAL HISTORY OF AN IDEA 18 (2007).

[48] This idea is fundamental to the Scriptures of all three monotheistic religions. *Psalm* 69:5 expresses it well: "O Lord, you know my folly; the wrongs I have done are not hidden from you." *Psalm 69:5*. *See also Psalm* 38:9. In the New Testament, *Luke* 12:2–3 records Jesus saying: "Nothing is covered up that will not be uncovered, and nothing secret that will not become known. Therefore . . . what you have whispered behind closed doors will be proclaimed from the housetops." *Luke* 12:2-3. *See Matthew* 10:26–27. *Hebrews* 4:13 underscores the connection between God's observation and human accountability: "Before him no creature is hidden, but all are naked and laid bare to the eyes of the one to whom we must render an account." *Hebrews* 4:13. Similarly, the Koran consistently maintains that Allah observes all human action. *See* THE HOLY KORAN 2.110, 2.233, 2.237, 2.265, 3.156, 8.72, 11.112, 41:40, 49.18, 57.4; 60.3, 64.2 (M.H. Shakir trans., 2000).

[49] *See* CHAYA HALBERSTAM & CHARLOTTE FONROBERT, LAW AND TRUTH IN BIBLICAL AND RABBINIC LITERATURE 40-49 (2010).

[50] *See* ZE'EV FALK, INTELLECTUAL PROPERTY IN THE LAWS OF ISRAEL: SOURCES AND INQUIRIES INTO THE RIGHTS OF AUTHORS AND INVENTORS 9-10 (1947).

[51] *See generally* Haim Navon, *Copyright in Jewish Law*, 7 TZOHAR 35 (2000).

[52] *See* Amihai Radzyner, *The Intellectual Ambivalence: Contemporary Halakhah and*

A. Models of Copyright Protection

In the early modern era, authors and publishers demanded copyright over the content of their books and strove to prohibit competitors from printing the same publications.[53] Printing and the book trade were innovative markets that lacked any legal precedent and discussion in Jewish law, presenting substantial challenges to those jurists who were called upon to rule on questions of copyright.[54] For instance, the Jewish law of unfair competition was understood in the Talmud to govern the conduct of an artisan entering into a local market where he would challenge the preexisting arrangements between other local craftsmen.[55] To apply the same doctrine to international book markets, where a publisher's most devastating competition might emerge from distant publishers in other countries, often seemed tenuous. A further difficulty in theorizing copyright in Jewish law was posed by the fact that most rabbinic authorities of the pre-modern age explicitly ruled that property rights governed only land and material possessions, but not intangibles such as authored compositions.[56] According to some rabbinic decisors, this distinction meant that the Jewish law of unjust enrichment could only be applied when one party benefited from using another's material property, but not when one party benefited from another's creative work.[57] Thus, the laws of unjust enrichment could not offer protection to authors and

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the Question of Copyright Defenses, *in* INTERDISCIPLINARY ANALYSIS OF INTELLECTUAL PROPERTY LAW 169, 207-10 (Miriam Marcowitz-Bitton & Lior Zemer eds., 2015).

[53] The first copyright statutes—the British Statute of Anne of 1717, the U.S. Copyright Act of 1790, and the French Revolutionary Decrees of 1791 and 1793—signaled a shift from the earlier privileges granted to printers and booksellers toward a theory of authors as owners of inherent rights in their creations. *See* MARK ROSE, AUTHORS AND OWNERS: THE INVENTION OF COPYRIGHT 4, 18, 54, 86, 132 (1993).

[54] *See* NETANEL, *supra* note 20, at 7. *See generally* Ze'ev Markon, *The People and the Book,* 2 HAMISHPAT 201 (1927).

[55] BABYLONIAN TALMUD, *Bava Batra* 21b; BABYLONIAN TALMUD, *Kiddushin* 59a. *Cf.* BABYLONIAN TALMUD, *Bava Metzia* 60a-b (concerning lowering prices to provide competitive services). *See also* ROMAN A. OHRENSTEIN & BARRY L.J. GORDON, ECONOMIC ANALYSIS IN TALMUDIC LITERATURE: RABBINIC THOUGHT IN THE LIGHT OF MODERN ECONOMICS 101-102 (3d ed. 2009).

[56] See Jeffrey L. Callen, *The Transfer of Intangible Assets and Intangible Rights: Talmudic, Medieval Post-Talmudic, and Islamic Legal Literatures*, 4 OXFORD J. L. RELIGION 491, 492 (2015), for a survey of sources and analysis of the tension between theory and practice on this matter. *See generally* ITZHAK BRAND, "OUT OF NOTHING": TRANSACTIONS IN INCORPOREAL ESTATE IN TALMUDIC LAW (2017).

[57] See HANOCH DAGAN, UNJUST ENRICHMENT: A STUDY OF PRIVATE LAW AND PUBLIC VALUES 51-70, 109-129 (1997), for a detailed comparison of the principles underlying the laws of unjust enrichment in Jewish law and in the Anglo-American legal tradition.

their publishers in the face of pirated editions.[58]

With the rise of new technologies in the twentieth century, however, new problems emerged that were not limited to competition between publishing houses. Xerox machines, cassettes, and compact discs all allowed for copying books, computer programs, and music in unprecedented quantities.[59] Moreover, over the past several decades, individuals have been able to make their own copies without using sophisticated machinery and at virtually no cost, prompting a host of questions regarding the distinctions between copying materials for commercial or personal use.[60]

The first problem that arose for early modern rabbinic decisors was determining the appropriate rabbinic categorization for the problem of copyright law.[61] What rule did copyright infringement violate? Surveying rabbinic writings of the early modern period demonstrates that rabbinic jurists were certain that infringing copyright was wrong under Jewish law, yet they struggled to ascertain which religious law prohibited copyright infringement.[62] Broadly speaking, the various rabbinic solutions to this conundrum may be assigned to one of two schools of thought: copyright as property or copyright as torts.[63] The first school viewed copyright as an extension of property rights, which Jewish law generally assigns to owners of land or tangible property.[64] If copyright is simply and straightforwardly property, then the owner's rights are absolute and she may impose whatever restrictions she wishes on her property.[65] Accordingly, any copy of the owner's property would be a severe infringement of the owner's rights, equivalent to theft.[66] Yet this school of thought is accepted by a minority of Jewish decisors.[67] The foundational sources of Jewish law, such as the Talmud and its commentators, developed in a period prior to the recognition

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[58] *See* NETANEL, *supra* note 20, at 7.

[59] *See* Robert P. Merges, *One Hundred Years of Solicitude: Intellectual Property Law, 1900-2000,* 88 CAL. L. REV. 2187 (2000), for an overarching discussion of intellectual property law's response to these challenges.

[60] *See generally* WILLIAM PATRY, HOW TO FIX COPYRIGHT (2012); ABRAHAM DRASSINOWER, WHAT'S WRONG WITH COPYING? (2015); PASCALE CHAPDELAINE, COPYRIGHT USER RIGHTS: CONTRACTS AND THE EROSION OF PROPERTY (2017).

[61] *See* Neil W. Netanel & David Nimmer, *Is Copyright Property?—The Debate in Jewish Law*, 12 THEORETICAL INQUIRIES L. 241, 245-47 (2011).

[62] Indeed, some decisors even concluded that there is no formal legal prohibition on infringing copyright, yet nonetheless went to great lengths to emphasize that doing so is not in accord with the moral standards of Jewish ethics. *See* Radzyner, *supra* note 52, at 207-10.

[63] *See* Netanel & Nimmer, *supra* note 61, at 246.

[64] *Id*. at 250.

[65] *Id.*

[66] *Id.* at 260.

[67] *Id.* at 247-48.

of the commercial worth of intangibles,[68] and finding precedents for the idea of copyright as property has thus frequently required significant creativity on behalf of rabbinic jurists.[69]

On the whole, Jewish law does not recognize intangibles as property.[70] This basic principle led many rabbinic jurists to object to the robust view of copyright as property.[71] The second school of rabbinic jurists therefore tended to view infringement of copyright as deriving from the laws of torts and related doctrines, but debated at length the specific prohibition in which copyright is grounded, providing an array of explanations including guild regulation, protection against unfair competition and unjust enrichment, binding custom, rabbinic printing privileges, enforcement of secular legal norms concerning commercial matters, or bolstering the moral standards of Israeli law. For our purposes, there is no need to survey the plethora of rationales provided by leading decisors for the laws of copyright.[72] Instead, we will address the central legal reasons provided by each school of thought, those found in core rabbinic texts that are referred to repeatedly throughout contemporary rabbinic writings.

One of the most important rulings frequently alluded to in the school of thought regarding copyright as property was written by the revered nineteenth century rabbinic jurist, Joseph Saul Nathanson, and issued in 1860. Nathanson stated that authors have a lasting and exclusive right to print their works:

> It is certain that a new book that is printed by an author, and he merited that his words will be accepted all over the world, it is obvious that he has a right over it forever. And in any event, if others print or renew any of the labor [needed for publication], no one else is permitted to do so without his [the author's] permission. For it is well known that Abraham Jakob of Hrubieszów who invented a calculating machine received a stipend all of his days from the emperor, may he be exalted,

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[68] See BRAND, *supra* note 56, for a discussion of a recent study challenging the accepted view and arguing that the earliest rabbinic sources did, in fact, recognize the value of immaterial assets.

[69] *See* Radzyner, *supra* note 52, at 180-88.

[70] See, for example, the rulings of three of the foundational codices of Jewish law: MAIMONIDES, MISHNEH TORAH, *Laws of Sale* 22:13; RABBI JACOB BEN ASHER, ARBA'AH TURIM, *Hoshen Mishpat* 212, RABBI JOSEPH KARO, SHULHAN ARUKH *Hoshen Mishpat* 212:1.

[71] *See* YEHUDA SILMAN, DARKHEI HOSHEN 180 (1999).

[72] Netanel & Nimmer, *supra* note 61, at 246–47, n.13. Nahum Rakover, an expert in Jewish Law and a National Religious Orthodox rabbi-law professor-attorney with Israel's Ministry of Justice, supported classifying copyright as property and incorporating Jewish law into modern Islamic law. *See generally* NAHUM RAKOVER, COPYRIGHT IN JEWISH SOURCES (1991).

> in Warsaw. And should not our Torah be as complete as their mundane conversation?! [i.e., the Torah must adhere to the standards accepted among the gentiles.] That is a matter that is refuted by commonsense. And it is an everyday matter that one who publishes a composition—he and his agents have a copyright.[73]

Nathanson refers to neither of the terms "property" or "ownership" overtly in his ruling.[74] Yet, by the nature of the rights that he addresses, it is clear that his frame of reference is the rights of property.[75] According to Nathanson, an author holds exclusive and incessant rights to his own work, requiring any others who wish to reprint the work to acquire the author's permission.[76] This conception closely parallels definitions such as Blackstone's right of property, "which consists in the free use, enjoyment and disposal of all his acquisitions, without any control or diminution . . . ."[77] It appears, therefore, that underlying Nathanson's ruling lies a strong view of copyright as property. And in fact, in rabbinic printing privileges that he granted to several authors and publishers in his town, Nathanson referred to an author's rights as an exclusive form of property, using the Hebrew terms for "property" and "assets."[78]

The notion of copyright as property implies a virtually absolute right of broad scope and unlimited duration.[79] This maximalist view has been invoked by contemporary decisors who argue that absent the property owner's consent one may not copy any portion of a text, song, or film.[80] Nathanson's ruling remains central to the contemporary argument that authors hold absolute ownership rights over their works.[81]

Even if copyright is defined as property, that is not to say that the owner necessarily has exclusive and absolute rights over his or her property. Indeed,

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[73] JOSEPH SAUL NATHANSON, RESPONSA SHO'EL U-MESHIV 1:44 (1865) (Hebrew) (translation provided by authors).

[74] *Id.*

[75] *See* Navon, *supra* note 51, at 41-42.

[76] *See* NATHANSON, *supra* note 73.

[77] 1 SIR WILLIAM BLACKSTONE WITH JOSEPH CHITTY 138 (London, W. Walker 1826).

[78] *See* NETANEL, *supra* note 20, at 222 (*qinyan* and *nahalah*, respectively).

[79] *See* Mark A. Lemley, *Property, Intellectual Property, and Free Riding,* 83 TEX. L. REV. 1031, 1037 (2005).

[80] *See* 4 YAAKOV ABRAHAM COHEN, EMEQ HA-MISHPAT: ZEKHOYOT YOTZRIM [4 VALLEY OF THE LAW: COPYRIGHT] 2 (2003) (citing R. Moshe Feinstein, R. Isaac Jacob Weiss, R. Joseph Eliashiv and R. Shmuel Wozner); NAHUM MENASHEH WEISFISH, MISHNAT ZEKHUYOT YOTZRIM, IM TESHUVOT VE-PSAKIM MI-GDOLEI HA-DOR [THE TEACHING OF COPYRIGHT, WITH RESPONSA AND RULINGS OF THE LEADING RABBIS OF OUR GENERATION] 21-22 (2002).

[81] *See* Lemley, *supra* note 79, at 1035-37 (arguing about absolute intellectual property rights based on the traditional property view and the social costs view).

Jewish law has a far more complicated view of property itself and frequently limits an owner's rights over his or her possessions.[82] For instance, rabbinic tradition relates that the core sin of the people of Sodom was their declaration that "what is mine is mine and what is yours is yours."[83] This insistence on the unqualified primacy of property is understood in rabbinic sources to include an explicit refusal to share or sanction uses of property that benefit the user but cause no harm to the owner.[84] Vindictive, parsimonious behavior such as this is not considered to be reproachful from simply a moral perspective; rather, it also has direct normative consequences. Under certain conditions, Jewish law demands that a property owner permit others to benefit from using his property free of charge, so long as the owner herself incurs no damages from the shared use.[85] At the same time, Jewish law does not view benefiting from another's property without causing any loss to the owner as unjust enrichment.[86] The rule against acting like a Sodomite "supports the view of some rabbinic jurists that private copying is permitted so long as the copier would not have otherwise purchased the copy and thus causes the author no loss."[87]

Yet most rabbinic authorities did not accept the idea of copyright as property, primarily because of the strong presumption in Jewish law that property rights do not apply to intangibles.[88] Thus, for instance, writes Maimonides in his formative code:

> A person cannot grant property rights, whether by sale or by gift, but with regard to something tangible, but something that is intangible cannot be acquired. How so? A person cannot grant property rights to the scent of a certain apple or the taste of a certain honey or a gem, and so on and so forth. Therefore, one who grants another the right to eat the fruits of this tree or the right to live in this house, the latter did not

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[82] *See* Daniel J. Elazar, *Obligations and Rights in the Jewish Political Tradition: Some Preliminary Observations*, 3 JEWISH POL. STUD. REV. 5, 10-11, 13 (1991) (discussing the property right limits under Jewish law such as the rights to inherit lands (*nahalah*), the rights for the poor to glean and the rights to sunlight when acquiring a property).

[83] MISHNAH, *Avot* 5:10.

[84] Netanel & Nimmer, *supra* note 61, at 257.

[85] *See* DAGAN, *supra* note 57, at 109-29.

[86] *See* B. S. Jackson, *Introduction to Symposium: Unjust Enrichment*, 3 JEWISH L. ANN. 3, 4 (1980); Netanel & Nimmer, *supra* note 61, at 257, n. 50.

[87] Netanel & Nimmer, *supra* note 61, at 258, n. 52. *Compare* COHEN, *supra* note 80, at 437-62 ("discussing this view, but ultimately presenting a doctrinal argument to reject it") *with* MOSHE FEINSTEIN, RESPONSA IGROT MOSHE, *Orakh Haim* IV: 40 (1959) ("holding that one who produces a cassette recording of a Torah class with the intent to earn a profit does not act like a Sodomite by affixing a notice that it is forbidden to copy the recording").

[88] *See* MOSES MAIMONIDES, MISHNEH TORAH, *Laws of Sale* 22:13-14.

> acquire any rights until he is granted the body of the house to live in and the body of the tree to eat its fruits.[89]

According to Jewish law, the prohibitions of theft and stealing are not applicable to intangibles because the laws of property do not protect them.[90] For this reason, most decisors have disagreed with this strong view of copyright and have instead sought to provide alternative reasons for the forbidden use of copyright.[91] Jewish decisors attempted to base a prohibition against copyright infringement on several different legal bases, primarily those of unfair competition[92] or unjust enrichment.[93]

The first to address copyright as a form of wrongful competition was Rabbi Moshe Isserles, the sixteenth century Polish jurist renowned as one of the greatest codifiers of Jewish law and generally regarded as a binding authority.[94] Isserles put forth his theory of copyright as wrongful competition in the context of a campaign to protect the rights of Rabbi Meir Katzenellenbogen, also known as the Maharam of Padua, who became embroiled in a debate over the printing of Maimonides' famous legal composition, the *Mishneh Torah*.[95] Rabbi Katzenellenbogen had edited a printed edition of the *Mishneh Torah* that had been pirated by a rival press, and appealed to Isserles to prohibit the purchase of a competing edition of

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[89] *Id.*

[90] *See* COHEN, *supra* note 80, at 24. *See generally* Zalman Nehemiah Goldberg, *Copying a Cassette without the Owner's Permission,* 6 TEHUMIN 196 (1984).

[91] The range of reasonings given demonstrates the difficulty in grounding the prohibition. For example, Ovadiah Yosef ruled that the basis of the prohibition was to be found in the general principle that "the law of the land is the law." OVADIAH YOSEF, *Responsa Yabi'a Omer*, 9 HOSHEN MISHPAT 7. Rabbi Isaac Herzog suggested that it was based on the even broader principle of "repairing the world" (*tikkun ha-olam*). *See* ISAAC HERZOG, 2 LAWS FOR ISRAEL ACCORDING TO THE TORAH 72 (1989).

[92] NETANEL, *supra* note 20, at 2, n.1. "The rabbinic term for wrongful competition is trespass, or '*hasagat gvul*.'" *Id*. As used in Deuteronomy 19:14, "that term originally referred to the prohibited act of moving one's neighbor's border markings, effectively seizing his land. But over the centuries it has come primarily to mean wrongfully encroaching upon another's livelihood or business opportunity, conduct that falls within the rubric of what is called unfair competition in secular law." *Id.*

[93] *See* Netanel & Nimmer, *supra* note 61, at 249 (elaborating on the views of various decisors).

[94] See ASHER SIEV, RABBI MOSES ISSERLES (1972), for a comprehensive biography of Isserles. While the episode described in the body of the text occurred during when Isserles was still a young man, it is characteristic of the significant role he played in the crucial chapter of rabbinic literature's transition from script to print. *See* Elchanan Reiner, *The Ashkenazi Elite at the Beginning of the Modern Era: Manuscript Versus Printed Book*, 10 POLIN: STUD. IN POLISH JEWRY 85, 93 (1997).

[95] MOSES ISSERLES (REMA), RESPONSA REMA, 10.

the book.[96] In his responsum, Isserles based his opinion on the talmudic prohibition against competing with a similar artisan in the same city,[97] and maintained that any competition is forbidden if it will cause clear and certain damages.[98] Isserles argued by analogy that it is forbidden to print the same book as one that has already been printed, since this will cause certain damages to the publisher.[99]

Taking this logic further, Rabbi Moses Sofer (known as the *Hatam Sofer*),[100] rabbi of Pressburg in Hungary at the beginning of the nineteenth century and one of the most influential Orthodox leaders of European Judaism, composed an entire treatise on the Jewish laws of unfair competition,[101] in which he drew together several Talmudic passages to apply the category of unfair competition to protect book publishers from having their books copied by others.[102]

The Talmudic passages cited in these two responsa,[103] as well as the opinions of Isserles and Sofer, serve as the basis for most of rabbinic discussion of copyright laws.[104] Moreover, they are found in countless endorsements by senior rabbis (*haskamot*) published at the beginnings of books of Jewish law to this day,[105] which fortify the position of copyright as subsumed under the laws of wrongful competition.

What is important to note is that if copyright is not a right of ownership but rather derives from the doctrine of unfair competition, the creator's exclusive rights are certainly exhausted if and when the creator is compensated for her initial investment in producing and distributing the work (traditionally understood as selling out the first edition). The reason is that the Jewish law of unfair competition protects a creator only against a copier who would deprive the creator of her livelihood, not merely cause the creator

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[96] *See* RAKOVER, *supra* note 72, at 140-45; JACOB ELBAUM, OPENESS AND INSULARITY: LATE SIXTEENTH CENTURY JEWISH LITERATURE IN POLAND AND ASHKENAZ 34-36 (1990).

[97] BABYLONIAN TALMUD, *Bava Batra* 21b.

[98] RABBI MOSES ISSERLES, *Responsa* 10, ¶¶ 4-6.

[99] *See Id*.

[100] *See* JACOB KATZ, *Towards a Biography of the Hatam Sofer*, *in* DIVINE LAW IN HUMAN HANDS: CASE STUDIES IN HALAKHIC FLEXIBILITY 403, 403 (1998); MAOZ KAHANA, FROM THE NODA BEYEHUDA TO THE CHATAM SOFER: HALAKHA AND THOUGHT IN THEIR HISTORICAL MOMENT 224 (2015).

[101] *See* RABBI MOSES SOFER, *Responsum* 79, HOSHEN MISHPAT. *See also id*. at 41.

[102] *See* David Nimmer, *In the Shadow of the Emperor: The Ḥatam Sofer's Copyright Rulings*, 15 TORAH U-MADDA J. 1, 26-27 (2008).

[103] MISHNAH, *Gittin* 5:8; BABYLONIAN TALMUD, *Bava Kamma* 21b; BABYLONIAN TALMUD, *Kiddushin* 59a.

[104] *See, e.g.,* NETANEL, *supra* note 20, at 3; Netanel & Nimmer, *supra* note 61, at 248.

[105] *See* RAKOVER, *supra* note 72, at 130.

to earn lower profits.[106] In contrast, if copyright is property, the author's exclusive rights are independent of whether unlicensed copying causes the creator substantial pecuniary harm.[107] As a general rule, "[u]nder Jewish law, [] property owner[s] may generally prevent conversion or unauthorized use of [their] property that would result even in relatively trivial monetary harm."[108]

In parallel to the conception of unfair competition, several jurists framed the problem of copyright as one grounded in the foundations of unjust enrichment. A well-known rule in Jewish law holds that if "this one benefits while the other incurs loss—the first is obligated to compensate; if this one benefits and the other incurs no loss—the first is exempt from compensation."[109] The first and most important decisor to invoke this idea with respect to copyright was Yehezkel Landau, an important judge and rabbinic authority who was the rabbi of Prague during the second half of the eighteenth century and is often known eponymously by the name of his great composition, *Known in Judah* (*Noda bi-Yehudah*).[110] In his responsum, Landau discussed the case of a person who hired a printer to print a certain book, and the printer subsequently used the same matrices to print part of the same book for his own benefit.[111] Landau ruled that in a case such as this the printer must compensate his client, according to the rule that when "one benefits while the other incurs loss—the first is obligated to compensate."[112] According to Landau, the printer benefited because he saved the expenditures of laying the letter presses, while the plaintiff lost money because fewer of his books would be purchased, due to competition.[113]

However, it is important to notice that Landau's ruling is not directly related to the problem of copyright. The argument invoked by Landau in the plaintiff's favor relied on the money invested by him, which subsequently

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[106] YAIR BACHRACH, RESPONSA HAVOT YAIR 42; RABBI MOSES SOFER, *Responsa Hatam Sofer*, 5 HOSHEN MISHPAT 61.

[107] This principle underlies the practice of rabbinic approbations (*haskamot*) and bans on republishing books or other media containing rabbinic works. *See* RAKOVER, *supra* note 72, at 125.

[108] Netanel & Nimmer, *supra* note 61, at 254 (citing Shmuel Shilo, *Kofin al Midat S'dom: Jewish Law's Concept of Abuse of Rights*, 15 ISR. L. REV. 49, 51 (1980) (discussing unjust enrichment)).

[109] BABYLONIAN TALMUD, *Bava Kamma* 20a:2 & 9, 20b:4, 21a:1 (Hebrew) (translation provided by authors). *See* BABYLONIAN TALMUD, *Bava Kamma* 97a:2; BABYLONIAN TALMUD, *Bava Metzia* 64b:8, 65a:1, 99b:5; JOSEPH KARO, SHULHAN ARUKH, *Hoshen Mishpat* 363:6.

[110] *See generally* KAHANA, *supra* note 100.

[111] YEHEZKEL LANDAU, RESPONSA NODA BI-YEHUDAH, *Hoshen Mishpat* 24.

[112] *Id.*

[113] *Id.*

provided for another's enrichment.[114] Landau's argument does not pertain to the intellectual property that was printed in the book. For this reason, the defendant was not required to return his profit, but only to pay his share of the arrangement of the letter presses.[115]

Moreover, according to the logic emerging from Landau's responsum, one may only forbid the direct use of letter presses that were intended for another person's use, but when the enrichment derived from another person's labor is indirect, it is impossible to forbid such use outright.[116] This ramification was teased out by a later jurist who responded to Landau's responsum in a case of his own concerning trademark. Rabbi Malkiel Tzvi Tannebaum, the rabbi of the Polish town of Łomża at the turn of the twentieth century, was asked to rule on the case of a man who created a perfume which gained an excellent reputation, while another man imitated the scent and marketed it under the name of the first person.[117] Tannenbaum ruled that according to Jewish law, the plaintiff had no claim against the defendant, because his enjoyment derived only from the plaintiff's reputation and not from any material object.[118] In such a case, the owner had no right to forbid copying, but could demand participation in his expenditures.[119]

While in modern terms this ruling would be classified under the laws of trademark, rabbinic jurists did not distinguish between the various types of intellectual property.[120] Tannenbaum's distinction between enjoyment of material objects and immaterial entities such as reputation became a significant one for subsequent decisors.[121] Tannenbaum's ruling grew to be increasingly important for the kinds of copyright questions that emerged in the twentieth century, as it is virtually impossible to construe a person downloading a recording or a computer program from the internet as in some way benefiting from a material object belonging to the owner.[122]

B. Contemporary Problems and the Solution of Personalized Law

One of the problems regarding copyright that has gained vital importance in contemporary religious society is the question of partial use of copyrighted

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[114] *See* Navon, *supra* note 51, at 38-41.

[115] *Id*. at 38.

[116] LANDAU, *supra* note 111.

[117] MALKIEL TZVI TANNEBAUM, RESPONSA DIVREI MALKIEL 3:157.

[118] *Id.*

[119] *Id*.

[120] *See* ISAAC HERZOG, [1 LAW OF PROPERTY] THE MAIN INSTITUTIONS OF JEWISH LAW 127 (1936).

[121] *See infra* Section II.b.

[122] *See infra* Section II.b.

material, such as copying parts of books or downloading some songs but not an entire album. Under the paradigm of copyright as property, most uses constitute severe infringement and are considered to be theft, and this indeed is the opinion of a handful of contemporary decisors.[123] However, as described above, most jurists have refrained from classifying copyright as property, and instead have viewed copyright as deriving from the laws of unfair competition or unjust enrichment.[124]

One of the outcomes of this view is that copying that does not cause monetary harm to the original creator cannot be catalogued as a violation of the creator's rights.[125] Accordingly, the author or musician has no claim against individuals who engage in private copying or even against someone who makes multiple copies of a work and gives it away for free.[126]

Perhaps because this outcome results in significant leniency in comparison to secular copyright laws and general modern assumptions about ownership of intangibles, rabbinic decisors have limited individual copying with a variety of stipulations. Strikingly, several jurists have suggested that individual copying or copying that is not intended for commercial gain is only permissible if the copyist or the recipient would not otherwise buy a copy of the work, as we will see below.

But how should the law determine whether the copyist would have bought the work in the alternative reality of her being unable to download it? Struggling to resolve this problem, several contemporary jurists have turned to personalized standards of law in determining this question. Thus, Rabbi Shlomo Zalman Auerbach, one of most renowned jurists and rabbinic leaders of the twentieth century, is cited as stating that:

> According to the letter of the law, it is impossible to forbid copying, for everyone does so; however morally one should not copy, for the publisher expended effort and money, and therefore if without the possibility of copying he would have bought [the work], his crime is more severe than if he would not [have bought the work].[127]

According to Auerbach, determining the penalty of a copyist requires first ascertaining the circumstances that preceded the copying. One must first establish whether the copyist would have bought the work had he not had

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123 Netanel & Nimmer, *supra* note 61, at 260.

124 *See supr*a Section II.a.

125 *See* Netanel & Nimmer, *supra* note 6161, at 254.

126 *See id*.

127 NAHUM MENASHE WEISFISH, MISHNAT ZKHUYOT HA-YOTZER; IM TESHUVOT VE-PSAKIM ME-GDOLEI HA-DOR [THE LAWS OF COPYRIGHT; WITH RESPONSA AND RULINGS OF THE LEADING RABBIS OF OUR GENERATION] 121 (2002) (Hebrew) (translation provided by authors).

access to copying it. If so, the penalty should be different from the penalty had he not had any *intent* to purchase the work.[128] Likewise, contemporary religious Kibbutz Rabbi Meir Nehorai maintains that "it is permissible to make a personal copy of a book or sound recording that one owns because the author's right is against unjust enrichment and only economic harm caused by commercial piracy gives rise to a claim under that right."[129] Yehuda Silman, a contemporary ultra-orthodox rabbinic leader, maintains that if one copies only for oneself, the prohibition of unfair competition does not apply.[130]

Similarly, in a comprehensive article on copying books or cassettes, Rabbi Naftali Bar Ilan argued that "in any case in which we are witnesses [i.e. it is clear to us] that a person will not buy a book and pay good money just to copy a small portion, there is no reason to refrain from copying that passage."[131] Bar Ilan goes on to support his position by arguing against both frameworks we adduced above. He maintains that there is no unjust enrichment in this case (a reference to the copyright as torts position) and that this is a case where "enforcement against Sodomites" (*kofin al middat sdom*) is the law (a reference to the copyright as property position).[132] He concludes by arguing that one who owns a book and wishes to have another copy for purposes of convenience in his own home may copy the entire book, provided that "it is clear to him that if he had to buy the book for the full price, he would not buy it."[133] This ruling emphasizes the subjective aspect of determining the law. It requires that a person be completely honest with herself and acknowledge whether she would have bought the entire work or not. And indeed, in his conclusion, Bar Ilan explicitly notes that "it is forbidden to copy a book for personal use in any event that the copier *knows in his heart* that if he were unable to copy, he would have bought the book."[134]

The internal, subjective assessment of one's own intentions is highlighted by Rabbi Nir Aviv, author of a book concerning internet use under Jewish law. He writes that:

One who knows unquestionably that he would not buy the work if he

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[128] *Id.*

[129] Meir Nehorai, *The Creator's Economic Right Over His Work*, 28 MISHLAV 39, 48 (1985) (Hebrew) (translation provided by authors).

[130] *See* SILMAN, *supra* note 71, at 181.

[131] Naftali Bar-Ilan, *Ha'atakat Sefarim o Kasetot [Copying Books or Cassettes]*, 7 TEHUMIN 360, 367 (1986).

[132] *Id*.

[133] *Id.*

[134] *Id.*

> could not copy it (and the Lord sees the heart)[135] it is still forbidden *ab initio* to copy, for a person may forbid others to use what is his even when he is not damaged (and all the more so for those decisors who think there is a prohibition against theft). Yet if he already transgressed and copied, it is doubtful whether it is possible to require him to pay, and he may rely on the more lenient opinions [that permit copying in this case].[136]

Use of copyrighted material is thus an endeavor that requires soul-searching. Only one who "unquestionably" recognizes that he would not buy the creative work is permitted to copy it.[137] This form of self-regulation is explicitly supported by the notion that "the Lord sees the heart," and will thus be fully cognizant of a copier's intentions and ensuing wrongdoing.[138] Divine omniscience thus guarantees the individual's self-report of which material he would or would not have purchased, allowing for the application of subjective, personalized standards of law.

III. CAN PERSONALIZED COPYRIGHT LAW BE APPLIED IN A MODERN LEGAL CONTEXT?

The personalized model of copyright of Jewish law may seem archaic and irrelevant to modern law. Shouldn't modern legal rules apply equally to all citizens? And is it possible to maintain the personalized version of copyright in a society that does not assume the omniscience of God? Divine omniscience and individualized law appear to be the two preconditions for adopting the personalized copyright model suggested in Jewish law.[139] Both assumptions are generally rejected in a modern secular legal system.[140] As we have already mentioned, one of the most basic characteristics of a legal system is its law's generality: law must apply equally to all individuals. Moreover, contemporary law, based on a secular order, certainly cannot rely on divine omniscience as an enforcement mechanism backing an order relying on individuals revealing the true subjective value of copyrighted material.

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[135] *See* 1 *Samuel* 16:7.

[136] NIR AVIV, MA'ASEH RESHET: HA-INTERNET BA-HALAKHAH [THE WORK OF THE NET: THE INTERNET IN JEWISH LAW] 65 (2013).

[137] *Id.*

[138] *Id.*

[139] *See supra* INTRODUCTION.

[140] See JOHN RAWLS, POLITICAL LIBERALISM 38-40 (Expanded ed. 2005), for a classic rejection of the first principle. See Hart, *supra* note 28, at 21, for an articulation of the necessity of law's generality.

A. Personalization and the Generality of the Law

Generality of the law is commonly perceived as a fundamental requirement of modern legal systems.[141] Nonetheless, we argue below that Jewish law's personalized copyright model may in fact not only suit but even be desirable to a modern legal setting. A realist approach to law, in which law should be judged by its outcomes and not necessarily by its adherence to abstract theoretical principles, may support adopting personalized legal rules. One of the most prominent realist approaches to law is the economic analysis of law.[142] This approach evaluates legal rules in light of their economic impact.[143] From an economic perspective, Jewish law's version of personalized copyright may in fact be desirable due to its enhancement of social welfare, which is the central economic metric.[144]

The justification for copyright from an economic perspective is that it is necessary to remedy an under-production problem arising from the "public-good" nature of expressive works.[145] According to economic theory, public goods display two characteristics: non-rivalrous consumption and non-excludability of benefits.[146] The former trait implies that the use of a copyrighted work by one individual does not diminish consumption opportunities for others.[147] The latter means that even users who did not pay for the provision of copyrighted content benefit from it.[148] Furthermore, once a work is produced, it can be copied by others and offered to the public at a

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[141] *See* CARDOZO, *supra* note 28, at 112; Hart, *supra* note 28, at 21.

[142] STEVEN SHAVELL, FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW, xix (2004).

[143] *Id.* at 1.

[144] Several scholars have recently suggested that an economic analysis favors personalization of legal norms in other fields, such as contracts and torts. *See* Ian Ayres, *Preliminary Thoughts on Optimal Tailoring of Contractual Rules*, 3 S. CAL. INTERDISC. L.J. 1, 4, n.15 (1993); Ian Ayres & Robert Gertner, *Majoritarian vs. Minoritarian Defaults*, 51 STAN. L. REV. 1591, 1592-93 (1999); George S. Geis, *An Experiment in the Optimal Precision of Contract Default Rules*, 80 TUL. L. REV. 1109, 1158 (2006); Cass R. Sunstein, Impersonal Default Rules vs. Active Choices vs. Personalized Default Rules: A Triptych 23 (Nov. 5, 2012) (unpublished manuscript) (on file with author); Libson & Parchomovsky, *supra* note 25, at 528-29. *See generally* Omri Ben Shahar & Ariel Porat, *Personalizing Negligence Law,* 91 N.Y.U. L. REV. 627 (2016); Ariel Porat & Lior Strahilevitz, *Personalizing Default Rules and Disclosure with Big Data*, 112 MICH. L. REV. 1417 (2014).

[145] *See, e.g.,* William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law,* 18 J. LEGAL STUD. 325, 326 (1989); Richard P. Adelstein & Steven I. Peretz, *The Competition of Technologies in Markets for Ideas: Copyright and Fair Use in Evolutionary Perspective,* 5 INT'L REV. L. & ECON. 209, 218 (1985).

[146] Gideon Parchomovsky & Peter Siegelman, *Towards an Integrated Theory of Intellectual Property*, 88 VA. L. REV. 1455, 1467, n.42 (2002).

[147] *Id.*

[148] *Id.*

price that does not allow original authors to recoup their investment in the production of the work.[149] Without legal protection, therefore, not enough copyrighted works would be created.[150]

"The legal exclusivity granted to copyright owners is intended to prevent unauthorized use of copyrighted content and ensure that authors are remunerated for their creative labors. The authors' monetary rewards come from voluntary market transactions between the authors and users of the works."[151] To prevent attempts at bypassing the market, copyright law imposes sanctions on unauthorized users of copyrighted material.[152]

Critically, though, from an economic perspective, our modern copyright system does not represent a first best solution. Adi Libson and Gideon Parchomvsky note:

> The grant of legal exclusivity to authors introduces the problem of supra-competitive (or monopolistic) pricing. Consequently, users who would have been willing to buy at the competitive price are denied access to content. And the penalties that are imposed on all unauthorized users come with a social cost: they drive away potential users of copyrighted content who derive positive value, but cannot afford to pay the asking price. Preventing such users from accessing copyrighted works decreases their welfare without enhancing incentives to create, since these potential users never provide any revenue for sellers.[153]

Yet limiting access to copyright to infra-marginal users—those who attribute lower value to its consumption than the market price—decreases social welfare, and imposes what in economic terms is termed a dead-weight loss.[154] On the one hand, limited access provides no social benefits. Restricting users' access to copyright material does not benefit creators, since in any event they would not purchase the copyrighted material on the market. Limited access thus serves no function in incentivizing creation of such material. On the other hand, limiting access *does* impose a social cost, eliminating the enhancement of welfare for those individuals by consuming the copyrighted content.

The model of personalized copyright that emerges from Jewish law can serve as a first best solution for contemporary law by restricting access to the

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[149] *Id.* at 1458-59.

[150] *See* Landes & Posner, *supra* note 145, at 328.

[151] Libson & Parchomovsky, *supra* note 25, at 527-28.

[152] *Id.* at 528.

[153] *Id.*

[154] *See, e.g.,* Christopher S. Yoo, *Copyright and Public Good Economics: A Misunderstood Relation*, 155 U. PA. L. REV. 635, 647 (2007).

copyright material to individuals who attribute higher value than the market price and permitting access to individuals who attribute lower value than the market price.[155] Such a model enables the conservation of economic benefit of copyright protection by maintaining the incentive for creators to create copyrighted content, without the economic cost of decreasing the welfare of individuals who attribute low value to the consumption of the content.

B. Personalization of Copyright Without God?

Even if one accepts the efficiency argument for Jewish law's model of personalized copyright law, there is still a significant barrier to transplanting such a model to a modern law context. The central feature that enables the viability of the Jewish law model is the underlying assumption of divine omniscience.[156] Any person has a strong incentive to proclaim that she values the copyright protected content less than the market price, which would exempt her from the need to purchase the content in order to consume it. Subjective valuation is an inner psychological attribute that other individuals cannot verify in any way. The only way that such a mechanism can function is for people to believe that someone *can* verify their true valuation. Under religious law, God serves in this supervisory role. The belief in a God who "sees to the heart" serves as a check on individuals underreporting their true valuation of the copyright content.[157] In a society that believes in an omniscient God who takes retribution for transgressions, this personalized model holds great force. The belief in a God from whom nothing can be hidden, including psychological state of minds, prevents people who attribute equal or higher valuation of protected content than the market price from claiming that they attribute lower valuation, allowing them to consume the content at no cost.[158]

Is it possible to apply a similar personalized copyright model in a secular modern legal system? We argue that the answer is positive. Modern technology offers a novel mechanism that can preserve the model of personalized law but replace the need for divine omniscience: big data. Digitization of commerce has led to a huge increase in big data regarding various characteristics of consumers and how they correlate with their consumption patterns.[159] Abundant data exists regarding the characteristics

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[155] See Libson & Parchomovsky, *supra* note 25, at 528, for a more detailed economic analysis of the model.

[156] *See supra* Section I.

[157] HOFFMANN LIBSON, *supra* note 33, at 126-152.

[158] *See supra* Section II.b.

[159] *See* Libson & Parchomovsky, *supra* note 25, at 530-31.

of various types of users who consume music and movies.[160]

"The high commercial value of the information regarding the characteristics of consumers of music and movies has prompted business enterprises, such as Comscore,[161] Quantcast,[162] and Musicwatch,[163] to establish big data sets on users. Other businesses, such as Tellapart, collect general data regarding consumers' characteristics and behavior and advised firms on how to utilize this information."[164]

This abundant big data allows for identifying certain groups in society with certain characteristics, determining that the expectancy that they would purchase copyright protected material is close to zero.[165] By applying a version of Jewish law's personalized copyright law, a differential legal treatment could be applied to these individuals. The penalties for infringing copyright may be lowered in regard to individuals with these characteristics or eliminated altogether.[166] In the age of big data there is no need to rely on individuals' self-assessment of their willingness to pay for purchasing copyright; instead, their willingness to pay can be estimated quite accurately based on external factors, given the abundant data we have on correlations between these external factors and past purchases of individuals.

CONCLUSION

Can ancient religious legal systems be a fruitful source of inspiration for modern secular law? Religious legal systems, with their assumptions about divine providence, reward and punishment, are commonly understood to be irrelevant to modern secular law, and their comparative study is seen as a curiosity. This Article proposed that the mechanisms developed by religious

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[160] *See id*. (regarding the availability of data regarding the characteristics of the consumers of music and video content).

[161] *Audience Targeting Solution*, COMSCORE, https://www.comscore.com/Products/Activation/Audience-Targeting-Solution (last visited May 18, 2021).

[162] *Platform*, QUANTCAST, https://www.quantcast.com/platform/data/ (last visited May 18, 2021).

[163] *Research Studies*, MUSIC WATCH, http://www.musicwatchinc.com/research-studies/ (last visited May 18, 2021).

[164] Libson & Parchomovsky, *supra* note 25, at 531. *See* Adam Tanner, *Different Customers, Different Prices, Thanks to Big Data*, FORBES (Apr. 14, 2014) https://www.forbes.com/sites/adamtanner/2014/03/26/different-customers-different-prices-thanks-to-big-data/#5dc657545730 (outlining a business Tellapart took over – Freshplum – and other competitors).

[165] See Libson & Parchomovsky, *supra* note 25, at 535-39, for an example on how it is possible to find indications for propensity to purchase copyright content from even a limited demographic data set.

[166] *See* Libson & Parchomovsky, *supra* note 25, at 528.

legal systems may profitably serve as a stimulus for thinking about new solutions in modern secular law.

Engaging in a comparative analysis, we showed how Jewish law deployed personalized standards of law to determine who should compensate the creators of copyrighted material and to what extent. Rather than setting a complete ban over using creative materials produced by others, rabbinic decisors argued that one must only refrain from copying if one would have otherwise bought the copied product. Thus, these decisors suggest that the decision whether to copy material is to a large extent a personalized decision that differs from one individual to another. Leaving the decision in the hands of the individual is offset by the presumption of divine omniscience, which suggests that God follows the individual's decision and can determine whether it is true or false.

We then argued that personalized standards of copyright should not be restricted to religious legal systems, but rather may be fruitfully implemented in modern, secular legal systems as well through the use of big data. In the contemporary world, fast-paced technological advances in the realm of big data allow for significant knowledge of an individual's profile, including remarkably accurate assessments of the value an individual accords to different products. Big data can thus substitute divine omniscience in underlying the use of personalized standards of copyright enforcement. As divine law is replaced by technological omniscience, new frontiers unfold in the uses of personalized law.