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# Journal of Intellectual Property Law

Volume 10 | Issue 1

Article 4

October 2002

# An Experimental Approach to the Study of Social Norms: The Allocation of Intellectual Property Rights in the Workplace

Yuval Feldman University of California, Berkeley

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# AN EXPERIMENT APPROACH TO THE STUDY OF SOCIAL NORMS: THE ALLOCATION OF INTELLECTUAL PROPERTY RIGHTS IN THE WORKPLACE

# Yuval Feldman\*

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<sup>\*</sup> PhD Candidate, Jurisprudence and Social Policy, Boalt Hall School of Law, University of California, Berkeley. I want to thank Professor Robert D. Cooter, Professor Robert J. MacCoun and Professor Mark Lemely for their help. I would also like to thank Ms. Martha Kelley and Ms. Gracie W. Waldrup for editing the manuscript. An earlier version of this Article was submitted for a seminar in Organizational Behavior, Hass School of Business, UC Berkeley, Spring 2001.

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# I. INTRODUCTION

Recently social norms have been the object of increasing attention from legal scholars. While initially only scholars from the law and society movement were involved in this line of research, over the last ten years the leading role in this area has moved to law and economics scholars.2 The interest of law and economics in social norms definitely represents a positive development, and, thanks to the central role of law and economics in U.S. law schools, it seems to have increased the amount of attention paid to social norms literature in legal scholarship generally.

Nonetheless, it seems that while more and more models and theories have been suggested, not much has been done to improve our extant data relating to the interaction of law and norms. In fact, the more psychologically-oriented legal scholars who discuss these trends in law and economics argue either that these models are not backed by current research<sup>3</sup> or, even less promising, could not be backed by future research, because they are simply not falsifiable.<sup>4</sup>

Moreover, much of the social norms scholarship focuses on abstract and hypothetical scenarios, such as smoking in airports<sup>5</sup> and cleaning after one's dog.<sup>6</sup> While naturally the focus on abstract situations allows for a clearer discussion of normative forces, there still seems to be an effort afoot to examine the particular relevancy of norms to legal doctrines. Most of the recent papers on social norms that examine their potential contribution to legal enforcement do not seem to differentiate between their effects on specific behaviors. Thus, there is no recognition of the possibility that the relevancy of norms to legal behavior will vary across different doctrines due to the unique social and situational circumstances in which people face legal doctrines.7

What seems to be fundamentally missing in the current norms scholarship in law and economics is a respect for the standing knowledge gathered by other

<sup>&</sup>lt;sup>1</sup> Amitai Etzioni, Social Norms: Internalization, Persuasion, and History, 34 LAW & SOC'Y REV. 157 (2000).

See, e.g., Robert C. Ellickson, The Market for Social Norms, 3 Am. L. & ECON. REV. 1 (2001).

<sup>&</sup>lt;sup>3</sup> See, e.g., Jeffrey J. Rachlinksi, The Limits of Social Norms, 74 CHI.-KENT L. REV. 1537 (2000).

<sup>&</sup>lt;sup>4</sup> See Robert E. Scott, The Limits of Behavioral Theories of Law and Social Norms, 86 VA. L. REV. 1603 (2000).

<sup>&</sup>lt;sup>5</sup> Richard H. McAdams, A Focal Point Theory of Expressive Law, 86 VA. L. REV. 1649 (2000).

<sup>&</sup>lt;sup>6</sup> Scott, supra note 4.

<sup>&</sup>lt;sup>7</sup> An important exception for the abstract approach of law and social norms research can be found in a symposium that explored the specific implications of the social norms theory for corporate law. See Symposium, Norms & Corp. Law, 149 U. PA. L. REV. 1607 (2001). For an introduction, see generally Michael L. Wachter & Edward B. Rock, Norms & Corp. Law. Introduction, 149 U. Pa. L. REV. 1607 (2001).

disciplines on the subject.<sup>8</sup> Without limiting the importance of the new perspective on social norms offered by economists and the unique ability of economics to explore social equilibriums, it is my position that they should not ignore this multi-disciplinary store of knowledge.<sup>9</sup> In fact, it seems that some of the issues raised in the above-mentioned critiques relating to the scientific validity of the law and economics of social norms could have been resolved if economists had been more willing to incorporate knowledge from other disciplines.<sup>10</sup>

In light of this evaluation of the current status of the law and economics of social norms, I have aimed in this Article to take an experimental approach<sup>11</sup> to the study of social norms in a specific context and in regard to particular doctrines. Naturally, I am not attempting to solve all of the above-mentioned limitations in one study. Rather, my purpose is to demonstrate the great potential for the law and social norms literature that lies in such an approach.

One of the arenas in which the social norms literature should have had a greater influence is that of employment relations.<sup>12</sup> Much has been written on the topic of organizational behavior and the interaction between norms and rules in the workplace. One of the main themes mentioned in this context relates to the fact that formal legal rules are limited in their ability to practically regulate the behavior of employees and employers. Nonetheless, the recent law and economic scholarship of social norms has yet to realize the uniquely important circumstances that exist in the workplace. I have chosen to focus specifically on the employees' behavior when moving from one company to another, because it deals with one of the most fascinating interactions between the legal rules and the social forces. This is a stage in which loyalty to the new employer seems to be, in many cases, at odds with loyalty to the previous employer. Among the behaviors that are of interest to the legal policymaker here is the use of intellectual property (IP) that is legally owned by the previous employer.<sup>13</sup> From the perspective of social norms, the use of IP by departing employees is primarily important for two reasons.

<sup>&</sup>lt;sup>8</sup> Robert D. Cooter, Law and Unified Social Theory, 22 J. L. & Soc. 50 (1995).

<sup>&</sup>lt;sup>9</sup> For an elaboration on the relationship between the law and economics of social norms and the psychological theories of social norm see Yuval Feldman & Robert J. MacCoun, Old Wine for the "New Norm:" Bottles: The Social Psychology of Social Norm and Legal Compliance, SUPREME COURT ECON. REV. (forthcoming Winter 2003) (on file with author).

<sup>10</sup> See, e.g., Austin D. Sarat, Law and Social Norms, 38 CHOICE 402 (2000).

<sup>&</sup>lt;sup>11</sup> Cf. Elizabeth Hoffman & Matthew L. Spitzer, Entitlements, Rights, and Fairness: An Experimental Examination of Subjects' Concepts of Distributive Justice, 14 J. LEGAL. STUD. 259 (1985).

<sup>&</sup>lt;sup>12</sup> See, e.g., Michael Segalla et al., Cultural Influences on Employee Termination Decisions: Firing The Good, Average or The Old?, 19 Eur. MGMT. J. 58 (2001).

<sup>&</sup>lt;sup>13</sup> For an excellent collection of papers that discuss some of the most important policy topics in this area, see NEW RELATIONSHIP: HUMAN CAPITAL IN THE AMERICAN CORPORATION (Margaret M. Blair & Thomas A. Kochan eds., 2000).

First, formal legal enforcement is very limited in this specific stage. Lawsuits against former employees are expensive and fairly uncommon. Furthermore, when an employee moves to another company, the first employer's ability to detect a violation is limited; this fact increases the transaction costs of formal control use<sup>14</sup> and, hence, increases the importance of non-formal controls.<sup>15</sup>

Second, social norms seem to be especially important in this context because the legal rules that regulate intellectual property in the workplace cannot be very informative without further clarifications from norms. <sup>16</sup> As I will discuss shortly, social norms are expected to have greater effect on behavior when people are less certain about what to do.

Intellectual property generally focuses on utilitarian thinking.<sup>17</sup> However, in the context of intellectual property in the workplace, more attention is given to non-utilitarian aspects, and especially to justice. The non-utilitarian foundations of information sharing are far from clear.<sup>18</sup> While some scholars refer to those employees who use previous employers' knowledge as "innovative entrepreneurs," others see them as simple thieves and as immoral employees.<sup>19</sup>

It is clear, then, that there are sufficient structural arguments for the importance of norms to the study of intellectual property. Apart from these, though, there is another key factor that makes a case study of the examination of IP in the workplace an especially interesting endeavor for a behavioral approach to the study of social norms. This factor is the reported culture of information sharing in Silicon Valley.

The norm of intellectual property in Silicon Valley was explored in Saxenian's book, Regional Advantage.<sup>20</sup> The low status, both legal and social, conferred to

<sup>&</sup>lt;sup>14</sup> See Ronald J. Gilson, The Legal Infrastructure of High Technology Industrial Districts: Silicon Valley, Route 128, and Covenants Not To Compete, 74 N.Y.U. L. REV. 575 (1999).

<sup>15</sup> It should be mentioned, though, that, in general, formal controls in the workplace are treated as limited. For econometric evidence concerning the limits of formal decisions of the NLRB compared with the influences of collective bargaining and work practices, see Robert J. Flanagan, Compliance and Enforcement Decisions Under the National Labor Relations Act, 7 J. LAB. ECON. 257 (1989).

<sup>&</sup>lt;sup>16</sup> See Edmund W. Kitch, The Expansion of Trade Secrety Protection and the Mobility of Management Employees: A New Problem for the Law, 47 S.C. L. REV. 659 (1996).

<sup>&</sup>lt;sup>17</sup> See generally Peter Menell, Intellectual Property: General Theories, ENCYCLOPEDIAL & ECON. VOL. II (Boudewijn Bouckaert & Gerrit De Geest eds., 2000). Menell argues that: "Not surprisingly, the principal philosophical theory applied to the protection of utilitarian works—that is technological inventions—has been utilitarianism." Id. at 130. See also Stanley M. Besen & Leo J. Raskind, An Introduction to the Law and Economics of Intellectual Property, 5 J. ECON. PERSP., Winter 1991, at 3.

<sup>&</sup>lt;sup>18</sup> See Menell, supra note 17, at 156-59 (discussing several non-utilitarian perspectives of intellectual property, including: libertarian, personhood, labor theory, distributive justice and democratic).

<sup>&</sup>lt;sup>19</sup> James Pooley, a prominent trade secret lawyer in Silicon Valley, has described his job as consisting of defending entrepreneurs and suing thieves.

<sup>&</sup>lt;sup>20</sup> AnnaLee Saxenian, Regional Advantage: Culture and Competition in Silicon

potential limitations on the transfer of knowledge by employees is the main cause, according to this book, of the success of Silicon Valley. While this book does a very good job of identifying the behavioral patterns of employees in Silicon Valley, it does not speak to the attitudes of employees there toward trade secret law when faced with the fact that sharing information is a violation of the law.

In sum, the extremely limited involvement of courts,<sup>21</sup> the conflicting economic rationales in regard to trade secrets,<sup>22</sup> and the differences among various regions in the United States with respect to competition<sup>23</sup> all combine to make the interaction of formal laws and social norms in the context of IP distribution in the workplace a promising case study.

# II. PURPOSES OF THE ARTICLE

In the previous section, I have examined some of the limitations of the current social norms scholarship in the fields of law and economics. I have advocated for an exploration of the effects of social norms in a real-life setting; moreover, I have promoted the idea that the social norms models should be explored separately and on different grounds, and should take into account the legal complexities. Furthermore, I have argued that employment relationships in general and IP distribution in the workplace in particular provide excellent arenas for case studies of social norms.

To meet the challenges stated in the introduction, I have taken an experimental approach<sup>24</sup> to the study of social norms among high-tech employees in Silicon Valley in the context of intellectual property. Such an approach will

VALLEY AND ROUTE 128 (1994).

<sup>&</sup>lt;sup>21</sup> This is part of the described norm in the Valley. See Hyde, infra note 59.

<sup>&</sup>lt;sup>22</sup> Thus, while most studies that involved rational choice, social control, and extra legal sanctions focused on phenomena such as theft or drunk driving (see, e.g., Daniel S. Nagin & Raymond Paternoster, Enduring Individual Differences and Rational Choice Theories of Crime, 27 L. & SOC'Y REV. 467 (1993)), the context of trade secrets is far more interesting because of the arguable social benefits that result from such violations of the law.

<sup>&</sup>lt;sup>23</sup> In most states in the United States, non-compete covenants are enforceable. California and seven other states constrain this option. *See infra* notes 53-55 and accompanying text for further discussion of this point.

<sup>&</sup>lt;sup>24</sup> I will explain the particulars of the study in the methodology section of this Article. However, for the purposes of the reader who is not familiar with social science methods, I would add at this point that an experimental approach differs from other types of research in its random assignment of study participants to different treatment conditions. In short, this randomization allows the researcher to test, in a relatively clear way, the causal effect between the manipulated factors and the measured behavior. In this particular example, I have controlled the source of the legal requirement (state law or employment contract). In addition, I have controlled for the normative status of the legal compliance to intellectual property regulations (high or low) compliance.

allow me to test the causal effect of norms on laws in a controlled way. Moreover, it will allow me to compare the effect of norms in the contexts of differing legal sources (employment contracts vs. state law) and doctrines (allocation of employee invention copyrights and divulging of trade secrets). In addition, in the context of employment relationships, I will examine the participants' attitudes toward their employers as well as the legal rules that regulate those employment relationships.

# III. STRUCTURE OF THE ARTICLE

This Article is divided into four parts. In the first part, I review and discuss the doctrinal and theoretical background for my research. I organize this discussion around three main themes:

- 1. A comparison of trade secrets regulation to ownership-rights allocations, 25 in the workplace in general and in Silicon Valley in particular.
- 2. The inter-relationship between employees' attitudes and perceived social norms with regard to legal compliance.
- 3. A comparison from a social norms perspective of legal compliance to IP requirements in state laws and in employment contracts.

In the second part, I explain the methodological approach that I take in this study and the factors that I have collected data on. In the third part, I present and analyze the empirical results of the study. Finally, in the concluding part of the Article, I discuss the theoretical and policy-related implications of my study for social norms scholarship as well as for the formal and informal enforcement of intellectual property distribution in the workplace.

#### IV. THEORETICAL AND DOCTRINAL BACKGROUND

A. THE LEGAL REGULATION OF INTELLECTUAL PROPERTY DISTRIBUTION IN THE EMPLOYMENT CONTEXT

Put simply, employees produce most of the knowledge in the world, but most of this knowledge will stay with their employers. There are three main types of

<sup>25</sup> While assignment of ownership rights could mean both copyrights and rights for patents, I have focused on copyrights because this study was done in the context of the software industry. I am mainly interested in a comparison between ownership rights and trade secrets.

intellectual property rights that are relevant in the employment context: trade secrets, copyrights and patents. In practice, though, these doctrines sometimes overlap. For example, in some cases, even if the employee owns the right to the invention, he will not be able to use it because trade secrets of the employer are embedded in the product. Nonetheless, with regard to employee inventions, there is a major theoretical difference between trade secrets and allocation of ownership rights. In the academic literature, human capital distribution between employer and employee is organized under two main categories: trade secrets and ownership rights assignment (copyrights and patents).<sup>26</sup>

# B. OWNERSHIP RIGHTS IN EMPLOYEE INVENTION

The overall picture of the legal environment regarding employee invention is usually described as being more in favor of the employer.<sup>27</sup> In most cases, courts enforce pre-assignment contracts.<sup>28</sup> One of the rare exceptions to this tendency occurs when the employee assigns rights to an invention that he or she developed independent of company resources.<sup>29</sup>

Two statutes in California are of interest with regard to the legal status of employee inventions. The first discusses the freedom of employers and employees to bargain over their property rights to inventions.<sup>30</sup>

- (a) Any provision in an employment agreement which provides that an employee shall assign, or offer to assign, any of his or her rights in an invention to his or her employer shall not apply to an invention that the employee developed entirely on his or her own time without using the employer's equipment, supplies, facilities, or trade secret information except for those inventions that either:
- (1) Relate at the time of conception or reduction to practice of the invention to the employer's business, or actual or demonstrably anticipated research or development of the employer; or
- (2) Result from any work performed by the employee for the employer.

<sup>&</sup>lt;sup>26</sup> There are some differences between the allocation of patents and the allocation of trade secrets in the work place that are less relevant to the purposes of this study.

<sup>&</sup>lt;sup>27</sup> For an historical review of this development, see Catherine L. Fisk, Removing the Fuel of Interest' from the Fire of Genius': Law and the Employee Inventor, 1830-1930, 65 U. CHI. L. REV. 1127 (1998).

<sup>&</sup>lt;sup>28</sup> See Evelyn D. Pisegna-Cook, Ownership Rights of Employee Inventions: The Role of Preinvention Assignment Agreements and State Statutes, 2 U. BALT. INTELL. PROP. L.J. 163, 172-73 (1994).

<sup>&</sup>lt;sup>59</sup> See Ronald B. Coolley, Recent Changes in Employee Ownership Laws: Employers May Not Own Their Inventions and Confidential Information, 41 BUS. LAW. 57, 59 (1985).

<sup>30</sup> CAL. LAB CODE § 2870 (West 2002).

(b) To the extent a provision in an employment agreement purports to require an employee to assign an invention otherwise excluded from being required to be assigned under subdivision (a), the provision is against the public policy of this state and is unenforceable.

Thus, the law in California, as well as in seven other states, allows employers to pre-assign any invention that is related to the employer's line of business or used by its equipment.

The second statute deals with the state-based allocation of property rights: "[e]verything which an employee acquires by virtue of his employment, except the compensation, which is due to him from his employer, belongs to the employer, whether acquired lawfully or unlawfully, or during or after the expiration of the term of his employment."<sup>31</sup>

The literature on this topic,<sup>32</sup> as with many similar bodies of literature dealing with the allocation of property rights, considers two major issues—fairness and efficiency. In the context of fairness (or equity), many argue against the injustice of the current distribution in which employees get almost nothing<sup>33</sup> for their creativity.<sup>34</sup> These scholars reiterate the classical view that employees are the "underdog" in the employment context and that creative employees should not be forced to assign the rights to their invention to their employer.<sup>35</sup> Nevertheless, even in the context of fairness, some argue that, given that employers internalize the risks of employing many engineers that invent nothing, it is fair that they should at least get rewarded for their better choices.<sup>36</sup>

In the context of efficiency, the picture is no simpler. Indeed, there are those who focus on offering an incentive to the innovative employee by way of a bigger

<sup>31</sup> CAL. LAB. CODE § 2860 (West 2002).

<sup>&</sup>lt;sup>32</sup> A thorough review of work for hire in the high-tech industry can be found in Matthew R. Harris, Note, Copyright, Computer Software, and Work Made for Hire, 89 MICH. L. REV. 661 (1990). See also Jon L. Roberts, Work Made for Hire: The Fiction, the Reality and the Impact upon Software Development, 1 HARV. J.L. & TECH. 97 (1988) (examining the application of the work for hire doctrine in the software development context).

<sup>&</sup>lt;sup>33</sup> Obviously, it should be mentioned that the common practice in most companies is that inventors usually get bonuses, stock options, and higher value in the labor market.

<sup>&</sup>lt;sup>34</sup> See, e.g., Ann Bartow, Inventors of the World, Unite! A Call for Collective Action by Employee Inventors, 37 SANTA CLARA L. REV. 673 (1997) (discussing the disincentives to innovate confronting the typical employee-inventor).

<sup>&</sup>lt;sup>35</sup> See Mark B. Baker & Andre J. Brunel, Restructuring the Judicial Evaluation of Employed Inventors' Rights, 35 ST. LOUIS U. L.J. 399 (1991) (complaining that the law does not do enough to protect employees).

<sup>&</sup>lt;sup>36</sup> See Robert P. Merges, The Law and Economics of Employee Inventions, 13 HARV. J.L. & TECH. 1 (1999).

share of the rights.<sup>37</sup> However, it seems that the mainstream law and economics scholars who discuss the allocation of rights in employee invention tend to support the view that all rights of employee inventions<sup>38</sup> should stay with the company due to transaction costs, risk allocations and team production arguments.<sup>39</sup> The same is true with regard to the policy of courts in the United States in general and in California in particular. Generally, judges tend to allocate employees inventions to the employer.<sup>40</sup> Such a legal policy might not intuitively seem fit,<sup>41</sup> given the common wisdom regarding the cultural value in the United States whereby an individual should own her creation.<sup>42</sup> The policy might be even more surprising when compared to California courts' low enforcement of trade secrets, which, at least by definition, are not the sole creation of the employee.

# C. TRADE SECRETS

While copyright assignments are a strict matter of who owns what, the area of trade secrets is much less clear. 43 To begin with, there is no legal consensus as to

Having a moral right to the fruits of one's labor might also mean having a right to possess and personally use what one develops. This version of the labor theory has some force. On this interpretation, creating something through labor gives the laborer a prima facie right to possess and personally use it for her own benefit.

Nonetheless, as Hettinger himself admits on page forty-four, the distributive justice perspective is clear: it does not mean that the creator should own the product, it means that she instead might enjoy other benefits for having produced it. Utilizing this rationale to an employment context might suggest that getting a bonus or partial ownership would satisfy the distributive justice principle.

<sup>&</sup>lt;sup>37</sup> See, e.g., Jay Dratler Jr., Note, Incentives for People: The Forgotten Purpose of the Patent System, 16 HARV. J. ON LEGIS. 129 (1979); Henrik D. Parker, Note, Reform for Rights of Employed Inventors, 57 S. CAL. L. REV. 603 (1984) (discussing the problem of incentives for inventors and the reduction in innovation in the United States).

<sup>38</sup> Especially with regard to firm-related inventions.

<sup>&</sup>lt;sup>39</sup> A very important paper in this context is Michael A. Heller, *The Tragedy of the Anticommons:* Property in the Transition from Marx to Markets, 111 HARV. L. REV. 622 (1998). See also Merges, supra note 36 (reviewing the management literature of innovation, and concluding that, in a world of team production, the law should assign all property rights to the employer).

<sup>&</sup>lt;sup>40</sup> See William P. Hovell, Patent Ownership: An Employer's Rights to His Employee's Invention, 58 NOTRE DAME L. REV. 863, 867 (1983).

<sup>&</sup>lt;sup>41</sup> As I will discuss in the next section, the most intuitive view about justifying intellectual property is related to the idea that if I have not created it, it was never there in the first place, and therefore I should own it. See Edwin C. Hettinger, Justifying Intellectual Property, 18 PHIL & PUB. AFF. 31, 39 (1989):

<sup>&</sup>lt;sup>42</sup> See Jane K. Giacobbe-Miller & Daniel J.A. Miller, A Comparison of U.S. and Russian Pay Allocation Decisions and Distributive Justice Judgments, Best Papers Proceedings 1995. ACAD. MGMT. J.

<sup>&</sup>lt;sup>43</sup> The definition of trade secrets in California can be found in CAL. CIV. CODE § 3426.1 (2001):

whether a trade secret is a property right or a legal obligation of confidentiality.<sup>44</sup> This very conceptual debate emerged in the U.S. courts.<sup>45</sup>

While some courts have said that "the starting point for the present matter is not property or due process of law, but that the defendant stood in confidential relations with the plaintiffs ...," other courts have said that "[t]he starting point in every case of this sort is not whether there was a confidential relationship, but whether, in fact, there was a trade secret to be misappropriated."

Thus, according to the first line of reasoning, the concept of trade secrets misappropriation is heavily related to the nature of the employment relationships. The main concern of trade secrets laws lies, therefore, in the improvement of legal ethics and trust in the employment context.<sup>48</sup> According to the second line of reasoning, trade secrets are more similar to other intellectual property rights in the sense that they require one to focus first on the property value of the secret. They thus share a similar rationale with other IP laws based on a utilitarian ideal, encouraging innovation.

In terms of public policy, the trade secrets literature has a very different perspective regarding the employee-employer relationship. While historically this doctrine has clearly favored employers, 49 public policy considerations regarding the freedom of occupation have made the enforcement of trade secrets, especially in California, much harder. Courts in California argue repeatedly 50 that the main

(d) "Trade secret" means information, including a formula, pattern, compilation, program, device, method, technique, or process, that:

(1) Derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use; and

(2) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

<sup>44</sup> See Miguel Deutch, The Property Concept of Trade Secrets in Anglo-American Law: An Ongoing Debate, 31 U. RICH. L. REV. 313 (1997) (reviewing the various factors that might lead us to consider whether a trade secret is in fact an in rem right, or only an in personam right, such as a contractual right).

45 See James Pooley, Defining Trade Secrets (1997) (unpublished manuscript-copy with the author) (generally arguing that trade secrets are extremely hard to define in court litigation). The following

two cases were quoted by him.

<sup>46</sup> E.I. DuPont De Nemours Powder Co. v. Masland, 244 U.S. 100, 102 (1917) (emphasis added).

<sup>47</sup> Van Products Co. v. General Welding & Fabricating Co., 213 A.2d 769, 783 (1965) (emphasis added).

48 Melvin F. Jager, TRADE SECRETS LAW, § 1.01 (1985).

<sup>49</sup> Catherine L. Fisk, Working Knowledge: Trade Secrets, Restrictive Covenants in Employment, and the

Rise of Corporate Intellectual Property, 1800-1920, 52 HASTINGS L.J. 441 (2001).

<sup>50</sup> See, e.g., Futurecraft Corp. v. Clary Corp., 205 Cal. App. 2d 279, 287 (1962) (stating that the employee "was privileged to disclose and use the formulas which he had developed—they being a part of the technical knowledge and skill that he had acquired...").

public policy consideration relates to the employee's mobility. The following quote is typical: "[T]he Second Circuit has observed that courts in trade secret cases 'often balance an employer's right to proprietary information against an employee's right to use his or her knowledge, training, and experience to gain a livelihood.' "51

An even stronger statement in favor of employee mobility can be seen in the following quote: "[T]he decision to focus on relationships and not to treat trade secrets as 'property' apparently reflects a policy choice by California authorities in which interests in promoting freer use of new ideas was elevated at least to some extent over interests in rewarding holders of economically significant secrets." 52

Moreover, trade secrets enforcement is best achieved via the non-compete covenant, since the employee lacks the opportunity and incentive to share her previous employer's trade secrets.<sup>53</sup> However, in California these contracts are not enforceable,<sup>54</sup> a reality that makes the enforcement of trade secrets harder. In this case, the court can no longer rely on the contract and must find out whether there was a trade secret and whether there was a misappropriation—both slippery terms. For this reason, Gilson<sup>55</sup> argues that it is very hard for employers to prevent employees from moving to their competitors.

Even more important than the formal legal regime is the informal reality of trade secrets in the Silicon Valley. Saxenian<sup>56</sup> argues that, as opposed to the classical belief of economists regarding the 'boundaries of the firms' and the 'tragedy of the commons,' the main cause of Silicon Valley's success is the spillover of knowledge that occurs between firms in the Valley. Because employees transferred negative information<sup>57</sup> and new ideas, the area as a whole has succeeded. In follow-up studies conducted by Gilson,<sup>58</sup> who focuses on non-

<sup>52</sup> Intermedics, Inc. v. Ventritex, Inc., 822 F. Supp. 634, 652, 27 U.S.P.Q.2d (BNA) 1641 (N.D Cal. 1993).

<sup>&</sup>lt;sup>51</sup> Roger M. Milgrim, 1 MILGRIM ON TRADE SECRETS § 5.01 (1994) (quoting Vermont Microsystems, Inc. v. Autodesk, Inc., 88 F.3d 142, 150, 39 U.S.P.Q.2d (BNA) 1421 (2d Cir. 1996)).

<sup>53</sup> See Kitch, supra note 16, at 667.

<sup>&</sup>lt;sup>54</sup> CAL BUS. & PROF. CODE § 16600 (Deering 1997) ("Except as provided in this chapter, every contract by which anyone is restrained from engaging in a lawful profession, trade, or business of any kind is to that extent void.").

<sup>55</sup> Gilson, supra note 14.

<sup>56</sup> SAXENIAN, supra note 20.

<sup>&</sup>lt;sup>57</sup> Negative information cannot be patented but it captures most of the knowledge aggregated by a firm, and many of the problems courts face in enforcing trade secrets center around the difficulties in preventing the ex-employee from using negative information he was exposed to during his employment period.

<sup>58</sup> See Gilson, supra note 14.

compete covenants, and Hyde,<sup>59</sup> who focuses on trade-secrets laws, the laws and especially the norms that eliminate the law are analyzed as moving toward the interests of the employees.<sup>60</sup> Stone<sup>61</sup> argues in a tone similar to Hyde that, given today's high velocity industries and the decline in job security, the employer is obligated to allow the employee the benefits of some of the confidential information he is exposed to during his tenure.<sup>62</sup>

These two competing trends in employees' rights<sup>63</sup> raise many questions about the legitimacy, justice and efficiency as premises for legal motivation, and will serve as the doctrinal foundation for the case study of my proposed empirical investigation.

The depiction of a pervasive norm for competition and against enforcement of trade secrets should lead one to wonder whether the fact that these norms are strong in the Valley has any effect on the perception of fairness, or willingness to admit such a violation of the law by Silicon Valley employees. In other words, my interest is whether the emerging social norms described in Hyde and Saxenian's field studies effect people's individual perceptions of what is and is not just. While law and economic scholars<sup>64</sup> favor this notion, because it supports their conception of efficiency in norm development, the full explanation for this behavioral change is far from clear. Does the fact that free transfer of knowledge

<sup>60</sup> Hyde argues that social norms abolish the enforcement of trade secrets in Silicon Valley.

The actual explanation of Silicon Valley's high-velocity labor market is the third hypothesis. Although employees depart Silicon Valley firms daily for competitors who will learn at least some information that the law calls a trade secret, employers rarely sue these employees or their new employers, for at least three reasons that can be documented. First, a few such highly-publicized suits accomplished little for plaintiffs, as will be seen from reviewing the journalistic coverage of these suits. Second, such suits imposed direct costs on these plaintiffs in reputation, internal morale, and recruiting. This will be confirmed from journalistic and interview accounts. Third, lawyers in the Valley who represent firms and venture capitalists concluded from this experience until recently that the working definition of trade secret in the Valley is narrower than the formal legal definition.

Id at Part IV.C.

<sup>&</sup>lt;sup>59</sup> Alan Hyde, The Wealth of Shared Information: Silicon Valley's High-Velocity Labor Market, Endogenous Economic Growth, and the Law of Trade Secrets (Sept. 1998), at http://andromeda.rutgers.edu/~hyde/.

<sup>&</sup>lt;sup>61</sup> Katherine V.W. Stone, The New Psychological Contract: Implications of the Changing Workplace for Labor and Employment Law, 48 UCLA L. REV. 519, 592-94 (2001).

<sup>62</sup> Id.

<sup>63</sup> Trade secrets vs. copyrights allocations.

<sup>&</sup>lt;sup>64</sup> This is basically the argument made by Gilson and Hyde. Given that everyone enjoys the prosperity of the Valley—both employees and employers—this norm is Pareto efficient. Everyone is getting more, etc. In the following section, I will discuss the concept of efficiency-of-norms developments in more detail.

benefits everyone in the Silicon Valley<sup>65</sup> affect people's attitudes toward violations of trade secrets? Moreover, is this shared belief a part of the new psychological contract in high-velocity industry, as some try to argue?<sup>66</sup> Do these emerging social and legal norms in favor of ownership-allocations enforcement and against trade secrets enforcement affect people's natural sense of justice (i.e. not taking what is not yours and taking what you created)? Further complicating the question is the need to keep in mind that, ignoring the legal norm in Silicon Valley, the basic distributive justice argument seems to go in the opposite direction. That is, pre-assignment of property rights for employee inventions seems to go against the basic labor theory of justice<sup>67</sup> which, at face value,<sup>68</sup> implies that one should own what she developed. However, abstaining from sharing the trade secrets of one's previous employer seems to meld with the basic distributive-justice principle—that one should not take and use the work of others.

1. Research Question 1:<sup>59</sup> Overall, Which Legal Doctrine is More Likely to Be Obeyed by Silicon Valley Employees? Following the above review of the differing normative status of trade secrets and allocation of ownership rights in Silicon Valley, the question arises: which legal doctrine will enjoy greater compliance and legitimacy among high-tech employees?

On the one hand, the legal culture of strong enforcement of pre-assignment contracts and weak enforcement of trade secret agreements might be reflected in unwillingness to break the former but not the latter. On the other hand, according to the labor theory of ownership and justice, it is more sensible to assume that participants will tend to take with them what they developed and leave with their previous employer what was theirs. Thus, they will be willing to violate legal requirements, but not trade secrets laws.

a. The "New" Norms Scholarship. As mentioned in the introduction, there has been a growing interest in the legal academia of late in social norms' effect on legal compliance. The wand economics scholars take a major part in this new "industry" and offer the most systematic treatment of the relationship between

<sup>65</sup> SAXENIAN, supra note 20, at 111-31 (especially with regard to "learning from failure").

<sup>66</sup> Stone, supra note 61, at 592-93.

<sup>&</sup>lt;sup>67</sup> JOHN LOCKE, SECOND TREATISE OF GOVERNMENT, 18-30 (C.B. Macpherson ed., Hackett Publishing 1980) (1690).

<sup>68</sup> Hettinger, supra note 41, at 38-41 (discussing the intuitive appeal of the labor theory, i.e. "I made it, hence it's mine"). See also Merges, supra note 36 (discussing the personhood and distributive justice theories, which seem to support the labor theory in the context of employee inventions).

<sup>&</sup>lt;sup>69</sup> To organize the structure of the Article, I will assign numbers to each question and will present the questions, the empirical results and the discussion at the end of the Article in accordance with this order.

<sup>70</sup> See Ellickson, supra note 2.

social norms and legal compliance. Neoclassical economic literature<sup>71</sup> has discussed the role of norms for more than two decades, but its implementation in legal theory is still in its infancy.

Of the many discussions that are of interest in the literature, I will focus on one; which is of the greatest import to the psychology-economics relationship. This line of research seeks to clarify whether the laws and social norms have an exogenous or endogenous effect on people's legal behavior.

The traditional law and economics research regarding norms' effect on legal behavior argues that the norm alters the social costs and that violators of the law need to pay.<sup>72</sup> If people perceive that the vast majority of those in their region behave in a certain way, they infer that following the norm is less likely to be costly and that behaving against the norms is more likely to be costly,<sup>73</sup> since it would be easier and cheaper for society to punish the individual violating the norm.

Thus, there is no change in the simple-price mechanism that economists use to explain compliance with the law.<sup>74</sup> The only improvement is in the willingness of law and economics scholars to recognize that non-legal sanctions might increase the price of anti-social legal behaviors and that people might be willing to go to the trouble of sanctioning others when they think that their behavior is against the norm. Thus, even if it is against their direct self-interest, people will be willing to impose a sanction.<sup>75</sup> Naturally, the willingness of people to sanction others who violate the law will make the deterrence factor stronger and more effective than would a situation in which enforcement is being conducted only by the formal legal system.<sup>76</sup> In that context it is unclear where economists would locate the concept of fairness, which, according to psychologists, is the primary motivation for legal compliance<sup>77</sup> i.e. whether perceived fairness of the law is

<sup>&</sup>lt;sup>71</sup> See, e.g., Hiroaki Hayakawa, Bounded Rationality, Social and Cultural Norms, and Interdependence Via Reference Groups, 43 J. ECON. BEH. & ORG. 1 (2000); Assar Lindbeck, Incentives and Social Norms in Household Behavior, 87 Am. ECON. REV. 370 (1997).

<sup>&</sup>lt;sup>72</sup> The original model regarding formal deterrence is attributed to Gary S. Becker, Crime and Punishment: An Economic Approach, 76 J. POL. ECON. 169 (1968). For a sociological perspective on the relationship between formal and informal deterrence, see Robert F. Meier & Weldon T. Johnson, Deterrence as Social Control: The Legal and Extralegal Production of Conformity, 42 AM. SOC. REV. 292 (1977).

<sup>&</sup>lt;sup>73</sup> Robert D. Cooter, Decentralized Law for a Complex Economy, 23 SW. U. L. REV. 443 (1994).

<sup>&</sup>lt;sup>74</sup> See Becker, supra note 72.

<sup>&</sup>lt;sup>75</sup> This idea is developed by Richard H. McAdams, *The Origin, Development, and Regulation of Norms*, 96 MICH. L. REV. 338, 366 (1997) (the pursuit of "hero" status and feedback effect generally can cause individuals to incur costs inflicting *material* sanctions on norm violators).

<sup>&</sup>lt;sup>76</sup> Dan M. Kahan, Social Influence, Social Meaning, and Deterrence, 83 VA. L. REV. 349, 354 (1997).

<sup>&</sup>lt;sup>77</sup> For the most comprehensive study of fairness as a motivating factor in legal compliance, see TOM TYLER, WHY PEOPLE OBEY THE LAW (Yale ed., 1990).

associated with people's willingness to sanction those who violate the law,<sup>78</sup> for example.<sup>79</sup> If the law's perceived fairness is related to that willingness to sanction those in violation of the law, then the more fair the law is, the more likely people are to obey that law even in the deterrence model.<sup>80</sup> This means that people might also be more likely to obey fair laws because they might think that others would be more likely to sanction them if they were to violate those laws.<sup>81</sup> Though in the experimental section of the Article, I focus on the deterrence model, it is important to see the deterrence model in the context of the other two effects of social norms on the law: expression and internalization.

The second model in the law and economics of social norms, expressive law, <sup>82</sup> posits the notion that the law creates focal points for cooperation and that the law is effective, not because it increases the price, but because it increases the likelihood of cooperation. <sup>83</sup> This model is still exogenous in its nature and only shifts the focus from negative reinforcement, social sanctions, to positive reinforcement, cooperation. In many scenarios these two models are interchangeable. For example, hiring an employee who violates a law, when this is the norm, becomes 'increased cooperation' and not hiring him becomes market sanctions. <sup>84</sup>

The third, and most progressive, model in the economic analysis of social norms examines the law's capacity to bring about an actual change in personal preferences, an *internalization* of new social values.<sup>85</sup> According to this model, the

<sup>&</sup>lt;sup>78</sup> See Richard H. Thaler, Anomalies: The Ultimatum Game, 2 J. OF ECON. PERSP. 195, 196 (1988) (the relationship between fairness and willingness to punish others, even when such punishment was costly for the individual, was demonstrated in a game theory context). This study did not examine the fairness of the law.

<sup>&</sup>lt;sup>79</sup> Thomas W. Dunfee, The Marketplace of Morality: First Steps Toward A Theory of Moral Choice, 8 Bus. ETHICS Q. 127 (1998).

See Paul H. Robinson & John M. Darley, The Utility of Desert, 91 NW. U. L. REV. 453 (1997).

<sup>&</sup>lt;sup>81</sup> See Jane Mansbridge, Starting With Nothing, in ECONOMIC VALUES AND ORGANIZATIONS 151-68 (Ben-Ner & Putterman eds., 1998) (discussing the fact that it is impossible to base social norms enforcement only on self-interest and that considerations of justice are necessary to understand the maintenance of norms).

<sup>&</sup>lt;sup>82</sup> For the traditional view of what expressive law means, see Wibren Van Der Burg, The Expressive and Communicative Functions of Law, 20 J. LAW & PHIL. 31 (2001) (regarding signaling moral standing of the state trough existing but not enforced laws).

<sup>83</sup> See Cass R. Sunstein, On the Expressive Function of Law, 144 U. PA. L. REV. 2021 (1996).

There have been a number of competing models in law and economics to the expressive function of the law, for an elaboration, see YUVAL FELDMAN, THE PSYCHOLOGICAL FOUNDATIONS OF THE EXPRESSIVE FUNCTIONS OF THE LAW (2002) (on file with author).

<sup>&</sup>lt;sup>85</sup> Margaret M. Blair & Lynn A. Stout, Trust, Trustworthiness, and the Behavioral Foundations of Corporate Law, 149 U. P.A. L. REV. 1735 (2001) (discussing high regulation of duty of loyalty as a signal of low trust). For a recent summary of the three possible effects on law by social norms (deterrence, expression and internalization), see Robert D. Cooter, Three Effects of Social Norms on Law, 79 OR. L.

effect of norms is no longer exogenous to the individual preference, affecting only the costs of behaviors; instead, it changes the order of their preferences<sup>86</sup> and, therefore, their willingness to pay for having engaged in behaviors that are approved or disapproved of according to social norms.<sup>87</sup>

2. Research Question 2: Relationships Between Perceived Norm, Perceived Fairness, Willingness to Punish and Intention to Obey the Law. While the above discussion has raised a wealth of empirical questions that should be answered relative to the interrelationship between the three models and the perceived-fairness of the law, this study focuses only on the social deterrence model and, in particular, on two questions:

First, what is the effect of the perceived norm of disobedience to the law both on employees' intentions to obey the law, and on people's willingness to sanction others who violate the law?

The easiest prediction, based on current research, 88 is that the greater the perceived number of people who obey the law, the more likely people will obey the law. Moreover, following the social deterrence model discussed by Cooter, 89 I would also expect that the greater the perceived obedience to the law is, the higher an individual's willingness to sanction violators of the law will be.90

REV. 1 (2000) (describing the three effects).

<sup>&</sup>lt;sup>86</sup> Elizabeth Anderson, Beyond Homo Economicus: New Developments in Theories of Social Norms, 29 PHIL. & PUB. AFF. 170 (2000).

<sup>87</sup> It should be noted that the three models of social norms in law and economics—deterrence, expression, and internalization—resemble the model that Kelman has presented regarding the three models of social influence. Kelman discusses "compliance," which focuses on the fear of society's reaction—the "rule" perspective; "identification" which focuses on the "rule" of the individual in the relationships; and "internalization" which focuses on the change in "values." It seems to me that while there are some shared features between identification and expressive law—both discuss societal expectations. For example, identification is reported by Kelman to trigger emotions of guilt, which economists usually associate with the internalization function of norms. See HERBERT C. KELMAN & LEE HAMILTON, CRIMES OF OBEDIENCE 103-24 (1989). However, Grasmick and Bursik, in their paper on social deterrence have used "guilt" to represent self-imposed sanctions and "embarrassment" to represent socially-imposed sanctions. Harold G. Grasmick & Robert J. Bursik, Jr., Conscience, Significant Others, and Rational Choice: Extending the Deterrence Model, 24 L. & Soc. Rev. 837 (1990) (emphasis added).

<sup>&</sup>lt;sup>88</sup> Robert B. Cialdini et al., A Focus Theory of Normative Conduct: A Theoretical Refinement and Reevaluation of the Role of Norms in Human Behavior, 24 ADVANCES IN EXPERIMENTAL SOC. PSYCHOL. 201 (1991).

<sup>&</sup>lt;sup>89</sup> See Robert D. Cooter, Decentralized Law for a Complex Economy: The Structural Approach to Adjudicating the New Law Merchant, 144 U. PA. L. REV. 1643, 1671 (1996) (stating that an increase in the perceived proportion of enforcers of norms causes a decrease in the price of punishment; this means that if people think that many people in their region violate the law, the cost of imposing a sanction on those people increases).

<sup>90</sup> Id.

Second, how does perceived fairness of the law relate to people's willingness to obey the law and sanction those who violate it?

While, again, the relationship between fairness and intention to obey is straightforward,<sup>91</sup> I would predict that fairness of the law would also have an effect on people's willingness to sanction others who violate it.<sup>92</sup>

Another feature that seems to be missing in the current literature of social norms is the assessment of when norms are likely to have the greatest influence The current theoretical shift in law and economics is the over behavior. recognition that, in one's decisionmaking, the perception of what others are doing should be taken into account. Currently, however, law and economic scholars do not offer any theoretical explanation to determine when norms matter more to people and whether we can identify ex-ante which situational factors will have a greater effect on people's behavior. 93 From a legal-policy-making perspective, knowing ex-ante when norms are going to matter more is extremely important since it might inform the legal policymaker as to the strategy most likely to effect a desirable change in the behavior of other people. Turning to psychology's literature on social norms will provide a wealth of competing and overlapping theories that might puzzle a person seeking to apply these theories to a legal context. 4 There are many relevant theories that could be taken into account but, to consider a few, I will mention Latane's theory of social impact, 95 the debate regarding moral development and social learning,96 the theory of social proof,97 Tetlock's theory of accountability.98 the relationship between injunctive and descriptive norms. 99 and the theory of just world. 100

<sup>91</sup> See TYLER, supra note 77.

<sup>&</sup>lt;sup>92</sup> See Steven Shavell & Michell A. Polinsky, The Fairness of Sanctions: Some Implications for Optimal Enforcement Policy, 2 Am. L & ECON. REV. 223 (2000). See also Ernst Fehr & Klaus M. Schmidt, A Theory of Fairness, Competition, and Cooperation, 114 Q. J. ECON. 817 (1999) (discussing fairness as a motivating force for costly social sanctioning).

<sup>&</sup>lt;sup>93</sup> See, e.g., Madan M. Pillutla & Xiao-Ping Chen, Social Norms and Cooperation in Social Dilemmas: The Effect of Context and Feedback, 78 ORGANIZATIONAL BEHAVIOR AND HUMAN DECISION PROCESSES 81 (1999).

See, e.g., Rachlinski, supra note 3 (explaining past research and various theories).
 Bibb Latane, The Psychology of Social Impact, 36 AM. PSYCHOLOGIST 343-56 (1981).

<sup>&</sup>lt;sup>96</sup> See ELLEN S. COHN & SUSAN O. WHITE, Comparing Theories of Legal Socialization, in LEGAL SOCIALIZATION, A STUDY OF NORMS AND RULES 27-50 (1990).

<sup>&</sup>lt;sup>97</sup> Jeffrey Pfeffer et al., The Effect of Uncertainty on the Use of Social Influence in Organizational Decision Making, 21 ADMIN. SCI. Q. 227 (1976).

<sup>98</sup> PHILIPE. TETLOCK & JERALD S. LERNER, Accountability and Social Cognition, in ENCYCLOPEDIA OF HUMAN BEHAVIOR, Vol. 1, 1-10 (1994).

<sup>99</sup> See Cialdini et al., supra note 88.

<sup>&</sup>lt;sup>100</sup> See Adrian Furnham, Just World Beliefs in an Unjust Society: A Cross Cultural Comparison, 15 EUR. J. SOC. PSYCHOL. 363-66 (1985) (demonstrating that in a society marked by discriminatory norms (South Africa) people will be rated higher in their just world scale than in U.K.).

In view of social psychology's many competing views on social norms, I wish to discuss a unifying theory for the purpose of organizing our understanding of the contingencies to be accounted for in the prediction of norms' effects on behavior: the theory of planned behavior.<sup>101</sup>

This paradigm, <sup>102</sup> though it might seem trivial at first glance, provides a useful mechanism for explaining the relations between norms, beliefs, attitudes, intentions and behaviors. <sup>103</sup> While economists have recently tried to define the effect of norms on their models abstractly, the use of this paradigm could lead us to a greater understanding of the situational factors moderating the effect of norms on legal behavior. This paradigm, could and should be taken into account to better understand the mix of normative control of behavior. <sup>104</sup> and attitudinal control of behavior. <sup>105</sup> Without taking this contingency into account, the predicted relationship between norms and behavior will be limited and inaccurate. <sup>106</sup> Any legal-policymaker <sup>107</sup> interested in influencing people and wishing to take into account the role of social norms needs to know when norms are more likely to have an effect and when attitudes are more likely to have an effect on people's behavior. <sup>108</sup>

<sup>&</sup>lt;sup>101</sup> Icek Ajsen, *The Theory of Planned Behavior*, 50 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 179 (1991).

<sup>&</sup>lt;sup>102</sup> The original version of the theory of planned behavior was introduced as the theory of reasoned action. See Martin Fishbein & ICEK AJZEN, BELIEF, ATTITUDE, INTENTION AND BEHAVIOR: AN INTRODUCTION TO THEORY AND RESEARCH (1975).

<sup>&</sup>lt;sup>103</sup> Matt Hill et al., The Effects of Attitude, Subjective Norm and Self-efficacy on Intention To Benchmark: A Comparison Between Managers with Experience and No Experience in Benchmarking, 17 J. ORGANIZATIONAL BEHAV. 313 (1996).

<sup>&</sup>lt;sup>104</sup> Antony S.R. Manstead, *The Role of Moral Norm in the Attitude-Behavior Relation, in ATTITUDES,* BEHAVIOR, AND SOCIAL CONTEXT: THE ROLE OF NORMS AND GROUP MEMBERSHIP 11-31 (Deborah J. Terry & Michael A. Hogg eds., 2000).

<sup>&</sup>lt;sup>105</sup> David Trafirnow, A Theory of Attitudes, Subjective Norms and Private Versus Collective Self-concepts, in ATTITUDES, BEHAVIOR, AND SOCIAL CONTEXT, THE ROLE OF NORMS AND GROUP MEMBERSHIP 47-66 (Deborah J. Terry & Michael A. Hogg eds., 2000).

Martin Fishbein & Icek Ajzen, On Construct Validity: A Critique of Miniard and Cohen's Paper, 17 J. EXPERIMENTAL SOC. PSYCHOL. 340 (1980) (arguing that, while attitudes and norms are obviously correlated, there is a theoretical reason to consider these two factors as separate, given that they represent theoretically distinctive constructs). For recent evidence of the importance of separating attitudes and norms in policy-oriented research, see James D. Gill et al., Ecological Concern, Attitudes, and Social Norms in Voting Behavior, 50 Pub. Opinion Q. 537 (1986).

<sup>107</sup> Or employer, in the narrow context of our case study.

<sup>&</sup>lt;sup>108</sup> For survey-generated evidence of the limited effect of university policies on involvement of university professors in business, see Karen Seashore Louis et al., Entrepreneurs in Academe: An Exploration of Behaviors Among Life Scientists, 34 ADMIN. SCI. Q. 110 (1989). The authors show that the attitudes of the professors toward such activity had a much stronger effect on intention than the rules in each university.

In the next section, I discuss the comparison of norms' effects on obedience to contracts and to state laws and, in so doing, I argue that one of the reasons for the predicted difference lies in the differing relationships of norms to attitudes relative to contracts and state laws.

Given the limits of this Article, I focus on one example of a situational factor that might moderate the effect of norms on behavior—social ambiguity. Sherif's 109 research on social norms proved that, under conditions of uncertainty and ambiguity, people are more likely to rely on the judgments of other people. 110 According to this model of 'social proof,' we can assume that if the legal doctrine is not clear to people, they will tend to focus more on other's judgments than on their own. Similarly, Cialdini 111 concludes that, "an individual is especially likely to attend to and follow the lead of others when the environment is uncertain..." 112

3. Research Question 3: Does Uncertainty about the Law Moderate a Norm's Effect on People's Self-reported Intention to Obey the Law? According to the social proof paradigm, I would expect that employees who are less certain about the legal meaning of trade secrets and of assignment of employee ownership rights will be more likely to be influenced by the prevailing social norm than employees who are more certain about the legal meanings of those laws.

In the introduction to this Article, I reviewed some of the lacunas of the current law and economic treatment of social norms, one of which was that the "law" is being treated as if there were one form of regulation, that functions similarly to a normative effect. <sup>113</sup> Furthermore, in the previous section, I argued that one of the main shortcomings of the law and economics of social norms is the lack of appreciation of questions crucial to any discussion of social norms in the context of legal policy making—when would norms matter more, and when would norms have a weaker effect on one's behavior?

Combining those two omissions led me to examine a very important policy question: are social norms likely to have a similar effect on obedience in the

<sup>109</sup> See Muzafer Sherif, An Experimental Approach to the Study of Attitudes, 1 SOCIOMETRY 90 (1937).
110 See David Dunning, Social Judgment as Implicit Social Comparison, in HANDBOOK OF SOCIAL COMPARISON: THEORY AND RESEARCH 353, 369 (Suds & Wheeler eds., 2000) ("[I]t is likely that people are the most likely to engage in social comparison when they are the most uncertain about themselves.").

<sup>&</sup>lt;sup>111</sup> See Robert B. Cialdini et al., Normative Influences in Organizations, in SHARED COGNITION IN ORGANIZATIONS: THE MANAGEMENT OF KNOWLEDGE 195 (Leigh L. Thompson et al. eds. 1999).

<sup>112</sup> Id. at 203-07 (specifically discussing the issue of dishonesty in organizations with attention to the manner in which injunctive and descriptive norms spread). In the context of the spreading of intellectual property norms in the Valley, one must look outside the organizational context.

<sup>113</sup> But see Richard H. McAdams, An Attitudinal Theory of Expressive Law (New and Critical Approaches to Law and Economics), 79 OR. L. REV. 339 (2000) (speculating that local authorities might be more likely to change the attitudes of the local citizens than the federal government).

contexts of state laws and employment contracts? Due to such factors as the process through which contracts and regulations are being presented (individual bargaining vs. state legislation) and the differing source of the obligation in question (state vs. employer), a different emphasis in norms-attitude-behavior relationships could be expected for an employee's obedience to contracts and to state laws. It Knowing ex-ante which form of legal communication, contracts or laws, is more likely to be influenced by perceived norms will provide extremely important information for the legal policymaker. Thus, the importance of the comparison of obedience to state laws versus obedience to employment contracts seems to be important from a broader employment-policy perspective regarding the best way to communicate to employees their legal obligations.

The need to compare the informal aspects of employment contracts and state laws seems to be especially important in the context of intellectual property. Much of the intellectual property distribution in the employment context relied on the use of employment contracts through which employers wish to improve their legal situation in case of a legal dispute regarding knowledge taken by the departing employee. 115

4. Research Question 4: Comparing the Normative Perceptions of IP Requirements for State Laws vs. Employment Contracts. What source of law will lead to higher obedience, state regulation or employment contracts?

On one hand, greater compliance to contracts could be explained through several theories in social psychology. For example, the procedural justice theory 116 focuses, among other things, on the important roles that voice and control play in perceived fairness. The theory is usually explored in the context of voice in employment relations or the litigation courtroom, but the initial bargaining phase of the contract could arguably trigger similar aspects of perceived voice and control, especially with comparison to state laws, in which both the voice and control of the individual are relatively limited. 117

Considerations of self-perception and cognitive dissonance also suggest that the contracting process might increase people's willingness to perform the contract. According to the self-perception theory, 118 if I signed the contract, I

<sup>&</sup>lt;sup>114</sup> For a discussion of the relative weight given to norms versus attitudes in one's decision making process, see Ajsen, supra note 101.

<sup>115</sup> In the context of trade secrets, the standard contract is called a non-disclosure agreement; in the context of ownership rights, the standard contract is called a pre-assignment agreement.

<sup>&</sup>lt;sup>116</sup> See TOM R. TYLER ET. AL., SOCIAL JUSTICE IN A DIVERSE SOCIETY, 75-103 (1996) (reviewing recent findings within this field). For additional taxonomy of organizational justice, see JERALD GREENBERG, THE QUEST FOR JUSTICE ON THE JOB 3-22 (1996).

<sup>&</sup>lt;sup>117</sup> Even for the states in which the referendum system exists, both voice and control are limited relative to a bargained contract.

<sup>118</sup> Daryl J. Bem, Self-Perception: An Alternative Interpretation of Cognitive Dissonance Phenomena, 74

probably thought the contract was good. Its "sister" theory, the cognitive dissonance theory, <sup>119</sup> might lead to the same conclusion. According to this theory, people will try to avoid situations in which their behavior and their attitudes are inconsistent. The application of this theory to contracts might mean that the personal commitment to accept the terms of the contract (change in behavior) should lead people to accept its terms as appropriate.<sup>120</sup>

I have suggested that the process and institutional mechanisms through which laws and contracts are introduced to people might lead to a different attitudenorm balance, and that, given the voice and control people have over the contract, contracts might seem more fair to people. However, the business reality might complicate this argument. From a more realistic perspective, one could expect that an employee would consider any distribution of intellectual property originating from a contract as a sign of low fairness. The reasons for that could be twofold. First, the company may need to use a contract because these rights were originally the employee's. Such reasoning might suggest that the legislation represents the status quo, while the contract represents a change in the legal status against the employee. 121 Second, from the few interviews that I have conducted. it is evident that the variation of non-disclosure agreements and pre-assignment contracts in the market is fairly low. 122 Most employees whom I have interviewed said that they were just given a handful of documents on their first day on the job and that no meaningful bargaining had occurred. According to this more realistic view, contracts should expect to have a lower level of perceived fairness than state laws that, presumably, considered the interests of the employee in the framing of the statute. 123

a. Compliance to Which Source of Law is More Sensitive to the Effect of Norms, Employment Contracts or State Laws? One might expect that compliance to contracts will be based more on attitudinal control, given the personal process of

PSYCHOL. REV. 183, 184-85 (1967).

<sup>119</sup> LEON FESTINGER, A THEORY OF COGNITIVE DISSONANCE (1957).

<sup>120</sup> Obviously, if people do not read the contract they sign, there will be no real change in their behavior.

<sup>&</sup>lt;sup>121</sup> See William S. Silver & Terence R. Mitchell, The Status Quo Tendency in Decision Making, 18 ORGANIZATIONAL DYNAMICS 34 (1990).

<sup>&</sup>lt;sup>122</sup> Neumeyer studied nine large U.S. companies in the late 1960s (General Motors, US Steel, IBM, Westinghouse, RCA, TRW, Gulf Oil, Polaroid, and Bell Laboratories) and discovered that all required employees to assign all their inventions to the company using very similar documents. FREDRIK NEUMEYER, THE EMPLOYED INVENTOR IN THE UNITED STATES: R&D POLICIES, LAW, AND PRACTICE 85-98 (1971).

<sup>123</sup> See Pauline T. Kim, Norms, Learning, and Law: Exploring the Influences on Workers' Legal Knowledge, 1999 U. ILL. L. REV. 447 (1999) (providing key support for the view that employees systematically overestimated the protection that employment law has given them). I am not aware of any counterstory regarding contracts.

commitment that figured in the contract's bargaining process; while compliance to state laws, which lacks the act of personal commitment, will be more sensitive to the normative status of acceptability of the law than employment contracts. It seems that knowledge that many of the people in a certain area are not obeying a certain law might reduce the legitimacy and creditability of the law and its enforcement. However, the sense of personal commitment that is engaged in the contracting process might mitigate the effect that norms would otherwise have on individual behavior.

Moreover, even from the informative perspective on norms, others' behavior is more relevant. This is due to the fact that, as opposed to law that is being applied equally to all people, contracts differ from company to company and from employee to employee, making the informational benefit from the following norm (i.e. the behavior of people in other companies) lower in contracts. <sup>125</sup> In other words, while current discussion of social norms treats the concept of "law" as a monolithic phenomenon, the approach taken in this article is that there are theoretical, and, hence, policy reasons that justify a more modular approach to the study of the social norm's effect on legal compliance.

# V. METHOD

The main purpose of this study is to demonstrate the potential benefit that the law and economics scholarship of social norms could gain from the use of social psychological constructs and methodologies. Such approaches could improve both the external validity of economic models of social norms by testing them in real life contexts and the internal validity by transforming some of the vague constructs of economic theory into measurable variables. The legal context that was chosen for this purpose is Silicon Valley engineers' compliance to intellectual property regulations and contracts. This context was chosen for two reasons. First, it presents an interesting scenario, given the Valley's norm favoring the free transfer of knowledge. This norm was described as efficient and well-accepted by Silicon Valley engineers. Second, the lack of formal legal enforcement in this area combined with the economic outcomes of non-compliance to the legal doctrines make non-formal social controls a very important area, both from an

<sup>&</sup>lt;sup>124</sup> See PAUL H. ROBINSON & JOHN M. DARLEY, JUSTICE, LIABILITY, AND BLAME: COMMUNITY VIEWS AND THE CRIMINAL LAW (1995) (arguing that closing the gap between community values and legality would improve the legitimacy of the law).

<sup>125</sup> I am not arguing that a norm of disobedience to contract is irrelevant, only that it is less relevant to one's decision to obey than with regard to state laws.

employment legal policy and from an intellectual property legal policy perspectives. 126

There are apparent limitations to the measurement of the actual behavior of employees, and their contextual perception of the norm is limited due to the difficulties in getting access to people in job transitions and the sensitivity of the subject matter. Due to empirical limitations of measuring the effect of the "real" norm on people's "actual" behavior, I have dictated an approach whereby people were presented with hypothetical scenarios. I controlled for the normative status (high/low disobedience), the doctrine (copyrights/trade secrets), and the source of the legal requirement (state law/employment contract). This experimental approach will enable me to speak about causality in relation to the effects of norms on behavior with more confidence than that displayed in the usual survey research (in which attributing the change in behavior to the social norm is somewhat ambiguous). 127

# VI. STUDY DESIGN

# A. PARTICIPANTS

The study was conducted in Spring 2001. The participants in this study work during the day in high-tech firms in the greater-Silicon-Valley area (San Francisco included), either as engineers or as technical employees. Sixty percent of participants were recruited from an evening MBA program at the Haas School of Business, University of California, Berkeley. The participants filled out the questionnaires during a break between their classes or were given a stamped envelope in which to return the questionnaire. Response-rate was approximately 60%. Forty percent of the participants were recruited from Silicon Valley companies (two large and two small). Response rate in this case was approximately 35%. 128

The final analysis of results was based on ninety participants.

<sup>&</sup>lt;sup>126</sup> See William S. Laufer & Diana C. Robertson, Corporate Ethics Initiatives As Social Control, 16 J. BUS. ETHICS 1029 (1997) (discussing the limits of formal controls in the context of changing the ethics of employees).

<sup>&</sup>lt;sup>127</sup> See, e.g., Ann E. Carlson, Recycling Norms, 89 CAL. L. REV. 1231 (2001) (providing study research). See also Ryan Goodman, Beyond the Enforcement Principle: Sodomy Laws, Social Norms, and Social Panoptics, 89 CAL. L. REV. 643 (2001) (providing an example of qualitative research on the relationship between norms and laws).

<sup>&</sup>lt;sup>128</sup> It should be noted that this sample is *not* argued to be a representative sample of Silicon Valley employees.

# B. PROCEDURE

Each participant was presented with two hypothetical scenarios, one regarding allocation of copyrights<sup>129</sup> and one regarding the divulging of trade secrets. Half of the participants got the trade secrets scenarios first, and half of the participants got the copyrights scenarios first. The two scenarios were equivalent for all participants except for two factors:

First, half of the participants were told that the source of the legal obligation (trade secrets/allocation of copyrights of invention) was an employment contract that they had signed, and the other half was told that the source was California state law. Second, the other half of the participants were primed to think that they were employed in a region in which the majority of employees complied with the law/contract, and half were told that the majority of the employees in this region did not comply with the law/contract. The assignment to the four conditions of the study was completely random.

Following each of the two scenarios, each participant was required to answer questions (Likert Scales 1-5) with reference to the specific scenario that was presented to them. The following questions were asked:

- 1. Each participant was asked whether he would have obeyed the statute/contract if he had faced circumstances similar to those in the described scenario.
  - 2. Subjects were asked whether they think the statue/contract is fair.
- 3. Subjects were asked whether they would have hired someone who, they know for certain, had violated the relevant statute/contract in the past.

These factors will be the dependent variables in the statistical analysis.

4. In addition, each participant was asked about her own employment history, loyalty to the company, knowledge about the law and the contract, her involvement in framing her employment contract, and her view regarding the relative fairness of the law and the employment contract relative to laws in other states and employment contracts of other employees.

At the end of the questionnaire, the participants were subject to a short manipulation check to ensure that they had understood the discriminating variables in the scenarios.<sup>130</sup>

<sup>129</sup> As mentioned, the allocation of ownership rights shares a very similar perspective with regard to copyrights and patents. Because the subject matter was software, the allocation of ownership rights in employee invention was focused on allocation of copyrights for software created by the employee.

<sup>130</sup> See exact text in the Appendix, infra pp. 97-104.

# C. VARIABLES, INDEPENDENT VARIABLES, SOCIAL NORMS<sup>131</sup>

- 1. Social Norms of High Compliance. Primed by: "previous survey in Silicon Creek showed that the majority of the people in Silicon Creek never broke in their professional career (the law/their employment contract)." 132
- 2. Social Norms of Low Compliance. Primed by: "previous survey in Silicon Creek showed that the majority of the people in Silicon Creek admitted that they have broken (the law/the contract) at least one time in their professional career." 133
- 3. Source of Law (Contract/Statute) and Legal Doctrine (Trade-secrets/Assignment of Copyrights).
- 4. Trade Secrets. The source of law and the doctrine were presented via one of the following four options: 134
  - "You have signed a contract in which you promised not to disclose the trade secrets of your previous employer when you move to a new job."
  - "The law in California is that you are not allowed to disclose trade secrets when you move to a new job." (Hereinafter: trade secrets.)
  - 3. "You have signed a contract in which you promised to assign to your current employer, 'the copyrights of any idea that will be developed by you with the use of the time, materials or facilities of the company." (e.g. computer code)
  - 4. "The law in California is that the copyrights of any idea that will be developed by you with the use of the time, materials or facilities of the company belong to the company." (Here and after: copyrights allocations.)
- 5. Loyalty to the Company. Loyalty to the company was measured through questions regarding the employee's intention to leave the company in the near future, the perceived importance of the success of the company, and by the level of salary gain that would prompt them to leave the company.

<sup>131</sup> Some economists tend to use the notion of norms interchangeably to conceptualize both what most others would do and what most others would approve. Social psychologists refer to the first definition as descriptive norms and to the second definition as injunctive norms. See Cialdini et al., supra note 88 (describing the differences in effect of injunctive and descriptive norms). For the purposes of this study I have used the concept of descriptive norms.

<sup>132</sup> See Appendix, infra at 97.

<sup>133 7,7</sup> 

<sup>134</sup> Id. at 97-104.

- 6. Position Characteristics. Position characteristics were defined by tenure, job title and whether the participant has major authority over other employees.
- 7. Contracting Process. People were asked to report on whether they are familiar with their explicit legal contract; they were also asked whether they had any effect on the framing of that contract generally, and on the intellectual property section in particular.
- 8. Social Comparison. Subjects were asked whether they think that the statute in California is better (from the perspective of employees) than statutes in other states, and whether their employment contract in general and the IP part of their contract in particular is better than average.
- 9. Legal Ambiguity. Legal ambiguity was defined by asking the participants about their certainty regarding the meaning of trade secrets and copyrights, and about their familiarity with their own contract and the laws of California.

# VII. RESULTS<sup>135</sup>

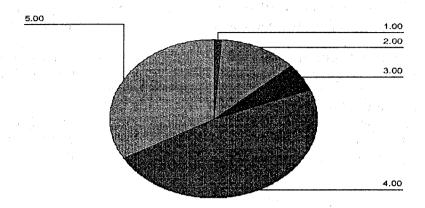
The first research question focused on the comparative compliance to copyrights allocations and to trade secrets. I have argued that there seem to be two competing normative forces in effect. On the one hand, the first proposition suggested that the legal culture of strong enforcement of pre-assignment contracts and weak enforcement of trade secret agreements will be reflected in an unwillingness to break the former but not the latter. On the other hand, the second proposition projected that the distributive-justice principle of taking what one developed and leaving with one's previous employer what is hers will be reflected in one's willingness to break copyright allocations requirements but not trade secrets laws.

The findings from my study support the latter proposition, as can be seen in the comparison of the following two figures:

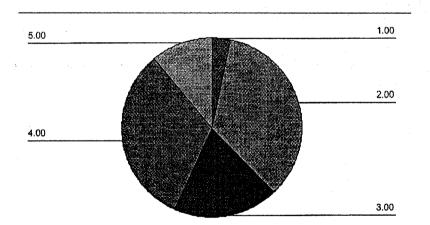
<sup>&</sup>lt;sup>135</sup> In order for this Article to be accessible to as many people as possible all of the statistical terminology was put into the Appendix, infra pp. 97-104

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# PARTICIPANTS' VIEWS ABOUT VIOLATING TRADE SECRETS WILL VIOLATE=1; WILL NOT VIOLATE=5



# PARTICIPANTS' VIEWS ABOUT VIOLATING COPYRIGHT ALLOCATIONS WILL VIOLATE=1; WILL NOT VIOLATE=5



The percentage of participants who reported that they would violate the law of trade secrets and copyrights allocations are as follows:

Eighty percent of the participants answered either 4 or 5 on a scale of 1-5 (where 5 is very unlikely to obey the law), 77% of the subjects answered between 4-5 regarding the perceived fairness of trade secrets requirements, and 68% claimed that they would not hire someone who violated trade secrets (4-5). Thus, the vast majority of the employees reported that they were likely to comply with trade secrets requirements.

With regard to copyrights for employee invention that were allocated to the employees, only 41% answered 4-5 regarding intention to obey, 44% regarding fairness of copyrights requirements (4-5), and only 32% claimed they would not hire someone who would violate the copyrights which were assigned to their previous employer (4-5).

# A. TRADE SECRETS VS. COPYRIGHTS ALLOCATIONS

To examine the possibility that employees were significantly more likely to respect trade secrets than copyrights, I have compared the means of the responses for the two scenarios.

The differences between the means are presented in Table 1A;<sup>136</sup> the t-values for the differences between the means are presented in Table 1B.<sup>137</sup> To summarize these tables, we could conclude the following for the relationship between trade secrets and copyrights: trade secrets were significantly and consistently more respected than ownership allocations in all measured normative dimensions, whether the source of the requirement was state law or the employment contract.

# **B. LEGAL AMBIGUITY**

Our second research question was whether legal ambiguity moderates the effect of the norm on people's self-reported intention to obey the law.

We hypothesized that people who are less certain about the legal meaning of trade secrets and of copyright law will be more likely to be influenced by the prevailing social norm than people who are more certain about the legal meanings of those laws (research question 2).

A moderation analysis was conducted by creating a centered multiple product interaction term for uncertainty and effect of the norm. In a multiple regression analysis, the interaction factor had no significant effect on employees' intention

<sup>136</sup> Table 1A, infra at p. 106.

<sup>137</sup> Table 1B, infra at p. 106.

to obey. Thus, I was not able to prove that uncertainty moderated the effect of norms on employees' intentions to obey the law.

#### C. THE ROLE OF FAIRNESS

Research Question 3 focused on the relationship between fairness and intention to obey, and willingness to sanction others who violate the legal requirement. The relationships are presented in Table 2. To summarize the findings presented in Table 2, in the ownership allocation scenario (copyrights): Perceived fairness of copyrights allocations was strongly related to intention to obey copyrights and willingness to punish those who violate the law. In the divulging-of-trade-secrets scenario, perceived fairness of trade secrecy requirements was significantly related to intention to obey trade secrets but not significantly related to willingness to punish those who violate trade secrets requirements. The relationship is and the relationship between fairness and intention to obey copyrights.

Interestingly enough there was no relationship between people's intention to obey ownership (copyright) allocation requirements and their intention to obey trade secrets, while there was a strong relationship between their willingness to sanction others who violate copyrights allocations or those who violate trade secrets requirements. Thus, those who are likely to obey trade secrets laws are not more likely to obey copyrights allocations, however those who are likely to sanction others who violate trade secrets are more likely to sanction others with regard to copyrights allocation.

Note: Due to the fact that I have found that the effect of norms on law is contingent on the source of the legal requirement (state regulation/employment contract), I will present the results regarding the effect of norms in the next section.<sup>140</sup>

# D. OBEDIENCE TO EMPLOYMENT CONTRACTS VS. OBEDIENCE TO STATE LAWS

Research Question 4 was focused on comparing the normative status of IP requirements that come from the state and from the employer and whether norms had a different effect on contracts and laws. Table 3 presents the means divided according to the source of law. As is evident in Table 3, while there was no difference between people's willingness to obey the trade secrets requirements when they came from the state or from the employer, there was

<sup>138</sup> Table 2, infra p. 107.

<sup>139</sup> Was approaching significance, P=0.066

<sup>&</sup>lt;sup>140</sup> See James Jaccard et al., INTERACTION EFFECTS IN MULTIPLE REGRESSION 34 (1990).

<sup>141</sup> Table 3, infra p. 108.

such a difference with regard to copyright allocations. It seems that participants were more likely to obey copyrights allocations when the requirement came from the state than when the requirement came from the employer. The question of whether this difference was significant will be explored by the next procedure.

# E. ANALYSIS OF VARIANCE

To determine the effect of the source of the legal requirement (law/contract), the type of legal requirement (trade secrets/copyrights), and the social norm (most people obey the law/disobey the law) on participants' intention to obey the legal requirement and sanction others who disobey the legal requirements, I have conducted an Analysis of Variance (Manova) procedure. The results are presented in Table 4.<sup>142</sup>

As can be seen from Table 4 with regard to copyright allocation, employees were significantly more likely to obey the requirement when it was presented as having come from the state than when it was presented as having come from the employment contract. However, there was no such difference with regard to trade secrets. That is, the likelihood that the employee would obey trade secrets laws when the requirements were shown to come from the state versus the employment contract was almost the same.

# F. EFFECT OF NORMS ON OBEDIENCE TO STATE LAWS VS. EFFECT OF NORMS ON OBEDIENCE TO EMPLOYMENT CONTRACTS

As can be seen from Table 4, social norms had no significant effect on people's intention to obey, however there was an interaction effect between social norm and the legal source.<sup>143</sup> This means that the effect of social norms on legal behavior is contingent upon the source of the legal requirement.

To determine that source, I have tested the norm separately for the participants who were told that the legal requirement was from their employment contracts and for those who were told that the legal requirement came from the state (T-Test for independent samples).

First I conducted the study presenting the legal source as the state. The results are presented in Table 5.144 As can be seen from Tables 4 and 5, when the source of the legal requirement came from the state law, social norms affected employees' intended compliance for both types of law (trade secrets and

<sup>142</sup> Table 4, infra at p. 109.

<sup>&</sup>lt;sup>143</sup> The interaction was significant with regard to copyrights but was only approaching significance with regard to trade secrets P=0.054

<sup>144</sup> Table 5, infra at p. 110.

copyrights allocations). Participants who were told that most people in their region violate the laws of California (trade secrets and copyrights allocations) were less likely to violate the law than participants who were told that most people in their region do comply with California's legal requirements.

However, norms were not found to have a significant effect on people's intention to sanction others<sup>145</sup> (although it was approaching significance with regard to copyrights). Thus I was unable to show that peoples' decision to sanction others is contingent upon the perceived number of people who violated the law.<sup>146</sup>

Next, I conducted the same test with participants who were told that the IP-related legal requirement came from their employment contract. Results are presented in Table 6.<sup>147</sup> As can be seen from the table, there was no significant effect of social norms on people's intention to obey the legal requirement when the source of the legal requirement was their employment contract.

# VIII. DISCUSSION

### A. COPYRIGHTS VS. TRADE SECRETS

As described in the introduction, scholars such as Gilson, Hyde and Saxenian, have argued that it is a norm in Silicon Valley for people to share trade secrets with other companies in the course of their career. In the present study, after having been confronted with the legal definition of trade secrets, the vast majority of the participants (80%) reported that they are not likely to disclose trade secrets. Thus, people were relatively likely to keep<sup>148</sup> trade secrets, even in the Silicon Valley, a culture in which information sharing is perceived as innovative.<sup>149</sup> Nonetheless, it could be the case that in reality people unknowingly use trade secrets.<sup>150</sup>

<sup>&</sup>lt;sup>145</sup> Understandably there was no effect on fairness, since a change in people's views of what is fair cannot occur within the present design (presumably, to test the effect of norms on fairness one must do a long-term study).

<sup>&</sup>lt;sup>146</sup> Obviously, from a statistical perspective this does not mean that the perceived proportion of people who engage in an activity has no effect on people's willingness to sanction others, it could simply be due to the limitations of the manipulation.

<sup>&</sup>lt;sup>147</sup> Table 6, *infra* at p. 111.

<sup>&</sup>lt;sup>148</sup> Or at least report that they intend to keep trade secrets.

<sup>&</sup>lt;sup>149</sup> See Gilson, supra note 14, at 585-86 (noting that knowledge spillovers supercharge innovation and facilitate new technological development).

<sup>150</sup> Stone, supra note 61, at 593 states it even more explicitly:

As courts expand the types of information they call trade secrets, it becomes increasingly difficult for an employee to avoid learning them. Even an employee who does not want exposure to trade secrets has no way to know which

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With regard to the allocation of copyrights, only 41% were likely to assign ownership rights to their employer. As suggested, this fact could be explained according to the basic labor theory<sup>151</sup> in which, even if legally one is told that according to the law she is not the owner, she might still feel that she owns a given product because she developed it. 152

As shown in the results section, there was a significant difference in the means of peoples' perceptions of fairness, intentions to obey, and intentions to sanction others who violate the law. Thus, while in many cases these two doctrines seem to regulate comparable behaviors, the employees who participate in my study seem to treat those two doctrines as substantially different. Moreover, it was shown that there was no relationship between those who would obey trade secrets and those who would obey copyright laws. Intuitively, one would expect that the same type of employees lacking respect for the law as well as their employer's regulations would be more likely to divulge trade secrets and to "take" ownership rights with them. This study, however, suggests that the reverse is true. Thus, there is no general tendency to respect the intellectual property laws in the workplace. This fact is especially interesting given that there is a strong relationship between their willingness to sanction violators of trade secrets and violators of copyright assignments.

Several factors could explain the discrepancies between the results of this survey and the account of Silicon Valley relayed by Hyde and Saxenian. First, this sample is not a strictly random sample of Silicon Valley employees. Sixty percent of the participants are employees who decided to go to an MBA evening program, which might define them as a unique group. 153 Second, I did not distinguish the Silicon Valley from other parts of the Bay Area. It is possible that San Francisco companies take part in a different culture. 154 Third, people might, on the one hand, prefer not to disclose their violations of trade secrets in a survey. On the other hand, they may feel less shame in disclosing that they would take their inventions with them, since it presents them as being creative and

information that he learns on a job might later be the subject of a successful claim of protected trade secret status. When such an employee changes jobs, he is at risk of a suit for misappropriation.

152 See Floyd W. Rudmin, To Own is to be Perceived to Own: A Social Cognitive Look at the Ownership of Property, 6 J. SOC. BEHAV. & PERSONALITY 85 (1991).

<sup>151</sup> See LOCKE, supra note 67.

<sup>153</sup> For example, employees who want to be managers (and therefore choose to go to an evening MBA program) might have more respect for trade secrets requirements than employees who do not. Though it should be taken into account that having major responsibilities for other people had no effect on viewpoints regarding trade secrets and copyright allocations.

<sup>154</sup> However, as mentioned in the introduction, Professor Saxnenian, who wrote the book on Silicon Valley, found the culture in those two cities to be very similar.

innovative—attributes less likely to be applied with regard to trade secrets violations. Fourth, people might violate trade secrets without knowing that they actually violate the law in doing so. In reality, the distinctions between secrets and general, acquired knowledge are somewhat vague. This study was obviously more artificial, as I asked people explicitly if they would violate trade secrets, thus triggering a level of legal consciousness that probably does not exist in most situations in which employees share trade secrets. Ownership rights to inventions are easier to identify. Thus, the reported difference in peoples' intentions to follow the legal requirements of those two doctrines might not be reflected in real life. Nonetheless, the potential importance of this study with regard to the findings of Saxenian, Gilson, and Hyde is that, when confronted with the legal meaning of know-how sharing, the vast majority of the participants found it inappropriate to do so. Future research should try to isolate whether Silicon Valley employees are, in fact, aware of the illegality of their actions and whether legal consciousness would have changed their decision to violate the law.

# B. LEGAL AMBIGUITY

While certainty about the law was positively associated with its perceived fairness, certainty did not moderate the effect of social norms on intention to obey. According to the theory of social proof, people tend to rely on norms more when circumstances are ambiguous. <sup>156</sup> In this study, we hypothesized that legal knowledge could pose the concept of social ambiguity. Such an effect was not present in this study. Two factors could explain this. First, due to the minor effect of social norms in general, it is hard for a moderation effect to become significant. Second, in the context of the study, people were not in doubt with regard to the meanings of trade secrets or copyrights allocations mean, as the terms were defined at the outset. To better explore the effect of ambiguity, it might be necessary to repeat the study without giving legal definitions to the participants. <sup>157</sup> Nevertheless, the line of research regarding legal ambiguity seems to be an important factor to consider for a policymaker interested in the effects of social norms on people's legal obedience. Moreover, future research should

<sup>155</sup> See Stone, supra note 61 (arguing that trade secret protection prevents an employee from disclosing knowledge that qualifies as a "trade secret"—a vague and uncertain standard at best).

<sup>156</sup> See Sushil Bikhchandan et al., Informational Cascades and Rational Herding: An Annotated Bibliography (UCLA, Anderson, Ohio State Univ., and Yale, Working Paper, 1996).

<sup>&</sup>lt;sup>157</sup> In fact, in a later unpublished experiment the author has demonstrated that legal ambiguity could sever as a moderator when participants were not given information on the illegality of the described behavior.

not rely only on people's self-reported knowledge about the law, 158 but instead should try to quiz their actual knowledge regarding the specific doctrine in question.

#### C. CONTRACTS VS. REGULATIONS

In my view, the most interesting and important finding in this study was the normative differences between state laws and employment contracts. The first finding was that people were less likely to obey their employment contract (compared to state laws) with regard to copyrights but not with regard to trade secrets. The second and even more important finding was that norms affected people's reported intention to obey the law but not their employment contract.

With regard to the first finding, the fact that the difference between the law and the contract was true only with regard to the copyrights allocations (and not trade secrets) seems to work well both in theory and in practice. From a practical point of view, most non-disclosure agreements do not worsen the position of the employee with regard to state requirements. With regard to invention reallocations, however, the pre-assignment contract usually gives the employer more rights than the state does. In the context of this study, there was no difference between the requirements which were posed as originating in contract versus state law. The participants, though, have considered copyright allocation requirements as originating in their employment contract as an indication of unfairness, in contrast to those participants who were told that the copyrights of their inventions belong, by law, to their employer.

While building the theoretical foundation for these findings requires further examination of people's views regarding their employer and the state, a preliminary point seems to arise when comparing trade secrets and ownership rights allocation. With regard to the employer's trade secrets, people had the same respect for keeping the secret in confidence when the requirement was the employer's as they did when it originated in state law. In this case the nature of the requirement itself is based upon natural law and ethics. However, with regard to assignment of ownership rights, people might be willing to accept the ownership requirement when it comes from the state, as the state enjoys

<sup>&</sup>lt;sup>158</sup> In my study, 60% of the participants said that they were either certain or very certain about what "trade secrets" means. The percentage rose to 77% when the same question was asked for "copyrights allocation."

institutional legitimacy<sup>159</sup> in determining who shall own what.<sup>160</sup> People are more reluctant to accept that an employer will assign the copyrights of an employee invention to the employee, because the employer does not seem to enjoy that same neutrality and legitimacy.<sup>161</sup> The employer's legitimacy is even further jeopardized when she assigns the ownership rights to herself.

The second finding in the context of the law/contract division is that norms effected people's intention to obey the law, but they had no effect on people's intention to obey their employment contract. This finding poses a key issue for the law and social norms literature to consider, as it offers a very important contingency in the context of social norms' influence on legal behavior and has practical implications for the policymaker. If the norms in a certain regime are such that they appear to the legal policymaker to be welfare-enhancing, then communicating a legal requirement through state laws will more likely be subject to the effects of norms, and therefore will be more likely to be obeyed. However, if the norms in a certain area are seen by the legal policymaker as welfare-destructing, as they are in the Silicon Valley area, then the contract is more likely to be resilient to the effects of norms when used to communicate the legal requirement.

From a theoretical standpoint, as with the previous finding about contracts, further exploration should be conducted before attempting to trace the theory behind this difference. However, as discussed in the introduction to these research questions, there are two main reasons to expect norms to have a weaker effect on employment contracts.

First, the contracting process is likely to create a personal commitment toward the contract. According to social psychological studies, when an individual has personally committed to a process, she is less likely to follow the behavior of others with regard to her decision to obey the contract. Second, from an informative perspective, following the crowd makes more sense with regard to state laws than to employment contracts. State laws are, by definition, equal for everyone. If one knows that others do not obey this law, one does not need to invest more in order to know what exactly people do not obey. However, with

<sup>159</sup> The most vocal scholar in this context is John Locke. For an analysis of Locke's views about the role of the state in the allocation of private property rights to individuals, see Jacqueline Stevens, The Reasonableness of John Locke's Majority: Property Rights, Consent, and Resistance in the Second Treatise, 24 POL. THEORY 423 (1996).

<sup>&</sup>lt;sup>160</sup> For a discussion of the influence of the allocation of property rights by the state, see John L. Campbell & Leon N. Lindberg, Property Rights and the Organization of Economic Activity by the State, 55 AM: SOC. REV. 634 (1990). But see David Vogel, Why Businessmen Distrust Their State: The Political Consciousness of American Corporate Executives, 8 BRITISH J. POL. SCI. 45 (1978).

<sup>&</sup>lt;sup>161</sup> For a comparison of the legitimacy of managers to that of the state, see Marian S. McNulty, A Question of Managerial Legitimacy, 18 ACAD. MGMT J. 579 (1975).

regard to employment contracts, which are by nature idiosyncratic, it would be much harder for the individual to judge whether violators of employment contracts had similar contracts to their own, just as it would be hard to determine what sort of incentives were embedded in those contracts. Hence, it makes more sense to follow the behavior of others with regard to laws than with regard to employment contracts.

It is also important to consider in this context the additional contract/law data that was gathered. From the survey, it was determined that 56% of the people were "very or somewhat familiar" with their contract but only 25% were familiar with the law of California. Eighty percent of the subjects (of those who knew-50% did not know) thought their contracts were average, while 85% answered that they did not know whether the law of California was more fair than the law in other states. Thus, it seems that, at least in terms of the information, contracts are a much better means of transferring information to employees than laws. This fact is very important for the law and economic discussions regarding the expressive role that law plays in the context of changing social norms. 162 It seems that, at least in terms of exposure to text, many more people know what is written in their contract than know what is written in the law of their state. Nonetheless, in terms of voice and control over the contract, only 28% of the participants reported that their employer took their views about the contract seriously or somewhat seriously. The percentage decreased to 23% when the same questions were asked about the intellectual property section of their employment contract.

## IX. CONCLUSION

In this study I have tried to demonstrate the advantages of an experimental approach and the importance of such an approach for the growing literature on law and social norms. One of the main findings of this study is that norms' effects on legal compliance are contingent on the source of the legal requirement. If not for the experimental approach taken in this study, one would not be able to isolate this effect from other factors that could explain this difference. One obvious downside of this approach is the artificial setting of the study, since I am not studying the actual behavior of people, but rather their reported intention to violate trade secret or copyright allocations with regard to a hypothetical scenario.

From a more doctrinal perspective, key findings were also gleaned from the comparative study of people's evaluations of copyrights versus their evaluations of trade secrets violations. While the culture of Silicon Valley and the policy of

<sup>&</sup>lt;sup>162</sup> Robert Cooter, Normative Failure Theory of Law, 82 CORNELL L. REV. 947 (1997).

courts seem to be less ambivalent in the enforcement of pre-assignments of inventions than they are in that of trade secrets, the participants' views about those two doctrines seem to move in the other direction. The participants were less likely to accept the legal requirements related to ownership allocations than those associated with trade secrets disclosure. The difference between the two doctrines was further pronounced by the fact that there was no relationship whatsoever between them with regards to employees' willingness to comply. Further research should be conducted in this vein to examine why exactly people consider those two legal requirements to be distinct. A greater understanding is especially important because, in many circumstances, the two doctrines could regulate similar behavior, and disputes about ownership rights allocations for inventions repeatedly trigger trade-secrecy arguments. 163

# X. APPENDIX A—THE QUESTIONNAIRES

To avoid unnecessary repetition, I am presenting the eight types of questionnaires in a shorter version. The order of the scenarios, as well as the percentage used, was randomized in the actual questionnaires to avoid carryover and order effects.

## STATE LAW SCENARIO

Imagine the following scenario.

You are an employee of a hi-tech company in the Silicon Creek, CA.

The law in California is that an employee is not allowed to disclose trade secrets of his current employer when she moves to a new company.

In the previous survey, which was conducted in the Silicon Creek, CA in 1999 (for social norms of high compliance), 81.6% of the subjects said that they had never violated this law in their professional life.

(For social norms of low compliance: 81.6% of the subjects said that they have violated the law at least one time in their professional career.)

You were offered a promotion in another company, and you decide to move to that company.

<sup>&</sup>lt;sup>163</sup> As discussed earlier, sometimes, even if the employee has the right to the invention, the fact that trade secrets of the employer were used in the production of the invention will prevent the employee from taking advantage of the invention.

What are the chances that you will obey this law in your new job (i.e.: that you will respect the legal obligations toward your former employer required by this law)? (Circle one)

I will most likely violate the law
I might violate the law
I am equally likely to obey or disobey the law
I think that I will not violate the law
I will most likely obey the law

How fair do you consider this kind of law? (Circle one)

Completely unfair

Somewhat unfair

Neither fair nor unfair

Somewhat fair

Completely fair

Now assume that you are an employer: how likely are you to hire someone who has violated this law when she moved between two previous jobs? (Circle one)

Very likely Somewhat likely Neither likely nor unlikely Somewhat unlikely Very unlikely

Now imagine the next scenario:

You are an employee of a Hi-tech company in the Silicon Creek, CA.

The law in California is that the copyrights of any idea that will be developed by you with the use of the time, materials or facilities of the company belong to the company (e.g.: copyright for a computer code).

(In the previous survey, which was conducted in the Silicon Creek in 1999, 82.1% of the subjects said that they had never violated this law in their professional life.

(For social norms of low compliance: 82.1% of the subjects said that they have violated the law at least one time in their professional career.)

You were offered a promotion in another company, and you decide to move to that company. What are the chances that you will use an idea that was assigned to your former employer by the law (and thus violate the legal requirement of copyright laws) in your new job? (Circle one)

I will most likely violate the law
I might violate the law
I am equally likely to obey or disobey the law
I think that I will obey the law
I will most likely obey the law

How fair do you consider this kind of law? (Circle one)

Completely unfair

Somewhat unfair

Neither fair nor unfair

Somewhat fair

Completely fair

How likely are you to hire someone who has violated this law when she moved between two previous jobs? (Circle one)

Very likely
Somewhat likely
Neither likely nor unlikely
Somewhat unlikely
Very unlikely

#### **CONTRACT SCENARIO**

Imagine the following scenario.

You are an employee of a Hi-tech company in the Silicon Creek, CA.

You have signed a "non-disclosure" contract with your current employer, in which you promise not to disclose the company's trade secret, even if you move to another company.

In the previous survey, which was conducted in the Silicon Creek in 1999, 81.6% of the subjects said that they had never breached a non-disclosure contract in their professional life.

(For social norms of low compliance: 81.6% of the subjects said that they have breached their non-disclosure contract at least one time in their professional career.)

You were offered a promotion in another company, and you decide to move to that company.

What are the chances that you will share trade secrets (and, thus, breach your contract with your former employer) in your new job? (Circle one)

I will most likely breach the contract
I might breach the contract
I am equally likely to breach or perform the contract
I think that I will perform the contract
I will most likely perform the contract

How fair do you consider this kind of non-disclosure agreement? (Circle one):

Completely unfair Somewhat unfair Neither fair nor unfair Somewhat fair Completely fair

Now assume that you are an employer. How likely are you to hire someone who has breached a nondisclosure contract when she moved between two previous jobs?

Very likely Somewhat likely Neither likely nor unlikely Somewhat unlikely Very unlikely

Now imagine a new scenario.

You are an employee of a Hi-Tech company in the Silicon Creek, CA.

You have signed a "pre-assignment" contract in which you promise to assign to your current employer, "the copyrights of any idea that will be developed by you with the use of the time, materials or facilities of the company" (e.g., copyright for a computer code).

In the previous survey, which was conducted in the Silicon Creek in 1999, 82.1% of the subjects said that they never breached this kind of contract in their professional career.

(For social norms of low compliance: 82.1% of the subjects said that they have breached this kind of contract at least one time in their professional career.)

You were offered a promotion in another company, and you decide to move to that company.

What are the chances that you will use an idea that you pre-assigned to your former employer (and thus breach the contract with your former employer) in your new job? (Circle one)

I will most likely breach the contract
I might breach the contract
I am equally likely to breach or perform the contract
I think that I will perform the contract
I will most likely perform the contract

How fair do you consider this kind of contract? (Circle one):

Completely unfair Somewhat unfair Neither fair nor unfair Somewhat fair Completely fair

Now assume that you are an employer. How likely are you to hire someone who has violated this contract when she moved between two previous jobs? (Circle one)

Very likely Somewhat likely Neither likely nor unlikely Somewhat unlikely Very unlikely

How certain are you about the definition of "trade secret?"? (Circle one)
 Very certain
 Somewhat certain
 Neither certain nor not certain
 Somewhat not certain
 Not certain at all

2. How certain are you about the definition of "copyright?"? (Circle one)

Very certain

Somewhat certain

Neither certain nor not certain Somewhat not certain Not certain at all 3. How familiar are you with the intellectual property laws in California? (Circle one)

Very familiar
Somewhat familiar
Neither familiar nor not familiar
Somewhat not familiar
Not familiar at all

4. How familiar are you with the explicit intellectual property terms in your employment contract? (Circle one)

Very familiar
Somewhat familiar
Neither familiar nor not familiar
Somewhat not familiar
Not familiar at all

5. How would you compare the intellectual property laws of California to those of other states? (Circle one)

Much fairer
Somewhat Fairer
Average
Somewhat less fairer
Much less fairer
Don't know

6. How would you compare the intellectual property section of your contract to what's available in the market? (Circle one)

Much fairer
Somewhat Fairer
Average
Somewhat less fairer
Much less fairer
Don't know

7. Did your employer take your position regarding any of the terms of your employment contract seriously in the time of negotiation the contract? (Circle one)

Very seriously
Somewhat seriously
Neither seriously nor not seriously
Somewhat not seriously
Not seriously at all

8. Did your employer take your position regarding any of the terms in the intellectual property section in the employment seriously? (Circle one)

Very seriously
Somewhat seriously
Neither seriously nor not seriously
Somewhat not seriously
Not seriously at all

- 9. What is your current position in the company? Junior engineer, senior engineer, projects manager, marketing director, other?
- 10. Do you have primary responsibility as a supervisor or manager for other employees? (Y/N)
- 11. How many years have you worked for your current company?
- 12. How many employers employed you in the past 5 years?
- 13. How many employees are there in your company?
- 14. How likely you are to leave the company you are currently working for in the coming year?

Very likely
Somewhat likely
Neither likely nor unlikely
Somewhat not likely
Not likely at all

15. What raise in your salary will you need to decide to leave your current company?

Less than 10% 10%+ 30%+ 50%+ 70%+

16. How important is it for you that your company will succeed.

Very important
Somewhat important
Neither important nor not important
Somewhat not important
Not important at all

Without turning the page, try to answer the following 2 questions.

According to the 1999 survey, did the majority of Silicon Creek employees (Circle one)

Obeyed the law
Obeyed the contract
Disobeyed the law
Disobeyed the contract

What legal doctrines were involved in the scenario presented to you in the questionnaire?

Trade secrets in both
Copyrights in both
Trade secrets in one and copyrights in the other

### XI. APPENDIX B—METHODOLOGICAL LIMITATIONS

- Representation of the sample was limited. One could argue that engineers who tend to go to business school might already adopt a managerial mindset and therefore might not be a representative sample. While the importance of representation is less critical with regard to the experimental part of the study, the findings comparing obedience to trade secrets and copyright allocation should be read with caution.
- Sample size was relatively small—a fact that should be taken into account especially considering that the statistical procedures did not produce significant results.

- Future research should also elaborate on position, characteristics, job title, overall work experience, and whether the employee was an executive. I have only asked about the primary responsibility of other employees, and it did not seem to be a distinctive factor.
- People's responses with regard to trade secrets were skewed and not normally distributed. This fact complicated the assumption of a linear relationship with regard to this dependent variable.
- Social desirability—given the sensitivity of the subject matter, it is possible that many people who intend to violate trade secrets, as described in the Saxaneian and Hyde books, reported otherwise in this survey. It is less clear why people would care more about social desirability in an anonymous survey than they do in interviews.
- Comparison with other regions—while priming the normative acceptability of the contract and the law was supposed to substitute for the empirical difficulties in measuring the effect of the norm, the study of the actual norms in this study was fairly limited, given that all of the participants come from the same place. Future research should conduct the survey in a number of states. Such a study will make it easier to test for internalization processes that could not be thoroughly studied using the experimental set of this study.

TABLE 1A

			Std.
	Mean	Std. Deviation	Error Mean
violation of trade secrets (violate=1; will not violate=5)	4.0000	.9944	.104
violation of copyrights (will violate=1; will not violate=5)	3.1333	1.1138	.117
fairness of trade secrets (unfair=1; fair-5)	4.0333	1.0217	.107
fairness of copyrights unfair=1; fair=5)	3.1222	1.1692	.123
narket sanctions for trade secrets will hire=1; will not hire=5)	3.7556	1.1149	.117
market sanctions for copyrights (will hire=1; will not hire=5)	3.1333	1.1138	.117

TABLE 1B

DIFFERENCES BETWE	EN MEANS O	F TRADE SECRI T-TEST (N=	<del>-</del>	GHTSPAI	IRED SAM	PLES
		Paired Differe	nces	t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			(2-tailed)
violation of trade secret- violation of copyrights	.8667	1.5080	.1590	5.452	89	.000
fairness of trade secrets- fairness of copyrights	.9111	1.1770	.1241	7.344	89	.000
market sanctions for trade secrets-market sanctions for copyrights	.6222	1.1667	.1230	5.059	89	.000

	CORREI	CORRELATIONS BETWEEN INTENTION TO VIOLATE, FAIRNESS OF THE LAW, AND LIKELIHOOD OF SANCTIONING OTHERS WHO HAVE VIOLATED THE LAW. ( $N=90$ )	TENTION TO VIOLA NG OTHERS WHO HA	BETWEEN INTENTION TO VIOLATE, FAIRNESS OF THE LAW, AND SANCTIONING OTHERS WHO HAVE VIOLATED THE LAW. $(N=90)$	: law, and likelihc aw. (N=90)	OD OF	
		violation of trade secrets	fairness of trade secrets	market sanctions for trade secrets	violation of copynights	fairness of copyrights	market sanctions for copyrights
violation of trade secrets	Pearson Correlation Sig. (2-tailed)	1.000	.221° .036	**911. .000.	020 .849	126 238	.142
fairness of trade secrets	Pearson Correlation Sig. (2-tailed)	.036	1.000	.195 300.	050. 987.	.429**	.154
market sanctions for trade secrets	Pearson Correlation Sig. (2-tailed)	.000	.195 .066	1.000	.027 .804	072 502	.452**
violation of copyrights	Pearson Correlation Sig. (2-tailed)	020 .849	.036 .739	.027 .804	1.000	.367**	.393**
fairness of copyrights	Pearson Correlation Sig. (2-tailed)	126 .238	.429** .000	072 .502	**75E.	1.000	.341**
market sanctions for copyrights	Pearson Correlation Sig. (2-tailed)	.142	.154	.452** .000	.393**	.341**	1.000
Correlation is s	• Correlation is significant at the 0.05 level (2-tailed)	level (2-tailed) level (2-tailed).					

TABLE

	COMPARI	COMPARISON OF MEANS: SOURCE OF LAW IS THE EMPLOYMENT CONTRACT VS. SOURCE OF LAW IS STATE LAW	CE OF LAW IS THE E	EMPLOYMENT CON	TRACT VS. SOURCE OF	LAW IS STATE LAW	
		violation of trade secrets will violate=1; will not violate=5	fairness of trade secrets unfair=1; fair =5	market sanctions for trade secrets, will hire=1; will not hire=5	violation of copyrights will violate=1; will not violate=5	fairness of copyrights unfair=1; fair=5	market sanctions for copyrights will hire=1; will not hire=5
Source of law is state law	Mean N Std. Deviation	44 .9401	3.9545 44 1.0773	3.5455 44 1.1300	3.3636 44 1.1632	3.2273 44 1.2174	3.000 44 1.1812
Source of law is employment contract	Mean N Std. Deviation	46 1.0541	4.1087 46 .9713	3.9565 46 1.0741	2.9130 46 1.0290	3.0217 46 1.1252	3,2609 46 1,0421

TABLE 4

	THE SOURCE OF LAW (LAW/CONTRACT) PLIANCE/LOW COMPLIANCE) ON NORMA TRADE SECRETS AND COPYRIGHT A	TIVE JUDGM	ENTS REGARDIN	
Source	Dependent Variable	df	F	Sig.
Social norms (high	violation of trade secrets	1	1.217	.273
compliance/low	violation of copyrights	1	.964	.329
compliance)	market sanctions for trade secrets	1	1.277	.262
. ,	market sanctions for copyrights	1	1.749	.190
	fairness of trade secrets	1	1.84	.669
	fairness of copyrights	1	1.79	.673
source of law	violation of trade secrets	1	.003	.956
(employment	violation of copyrights	1	4.470	.037
contract/state law)	market sanctions for trade secrets	1	3.249	.075
,	market sanctions for copyrights	1	1.238	.269
	fairness of trade secrets	1	.332	.566
	fairness of copyrights	1	.864	.355
social norms*	violation of trade secrets	1	3.812	.054
source of law	violation of copyrights	1	7.070	.009
(interaction)	market sanctions for trade secrets	1	.179	.673
(	market sanctions for copyrights	1	1.974	.164
	fairness of trade secrets	1	2.868	.094
	fairness of copyrights	1	1.333	.252

TABLE 5

EFFECT OF NORMS ON INTENTION TO VIOLATE TRADE SECRETS AND COPYRIGHT ALLOCATIONS WHEN SOURCE OF LAW IS STATE LAW								
	high compliance=1 low compliance=0	N	Mean	Std. Deviation	Std. Error Mean			
violation of trade secrets	.00	22	3.6818	1.0414	.2220			
	1.00	22	4.3182	.7162	.1527			
market sanctions for trade secrets	.00	22	3.3636	1.2168	.2594			
	1.00	22	3.7273	1.0320	.2200			
violation of copyrights	.00	22	2.9545	1.0455	.2229			
	1.00	22	3.7727	1.1519	.2456			
market sanctions for copyrights	.00	22	2.6818	1.2105	.2581			
	1.00	22	3.3182	1.0861	.2316			

T-TES	(INDEPENDENT SAMPLES)		
	t-test for Equ	uality of Means	
	t	df	Sig. (2-tailed)
violation of trade secrets	-2.362	42	.023
market sanctions for trade secrets	-1.069	42	.291
violation of copyrights	-2.467	42	.018
market sanctions for copyrights	-1.835	42	.074

TABLE 6

high compli low compli		N	Mean	Std. Deviation	Std. Error Mean
violation of trade secrets	.00	26	4.0769	1.0926	.2143
	1.00	20	3.9000	1.0208	.2283
market sanctions for trade secrets	.00	26	3.8846	1.0325	.2025
	1.00	20	4.0500	1.1459	.2562
violation of copyrights	.00	26	3.0769	1.0168	.1994
	1.00	20	2.7000	1.0311	.230
market sanctions for copyrights	.00	26	3.2692	1.0023	.1966
	1.00	20	3.2500	1.1180	.2500

T-TEST (INDEPENDENT SAMPLES)							
	t-te	est for Equality of Me	ans				
	t	df	Sig. (2-tailed)				
violation of trade secrets	.560	44	.578				
market sanctions for trade secrets	513	44	.610				
violation of copyrights	1.239	44	.222				
market sanctions for copyrights	.061	44	.951				