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An Economic Theory of Information Escrows

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and

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A variety of information escrows – including allegation escrows, suspicion escrows and shared-interest escrows – hold the promise of reducing the first-mover disadvantage that can deter people with socially valuable private information from disclosing that information to others. Information escrows allow people to transmit sensitive information to a trusted intermediary, the escrow agent, who only forwards the information under pre-specified conditions. For example, an allegation escrow for sexual harassment might allow a victim to place a private complaint into escrow with instructions that the complaint will only be lodged with the proper authorities if the escrow agent receives allegations against the same individual by at least one other claimant. We assess the benefits and costs of allegation escrows and discuss how they might be applied to a variety of claims – including sexual harassment, adultery, corporate and public whistle-blowing, and physician reporting of negative drug reactions. We also show how analogous “shared-interest escrows” might be used in workplace dating and adoption contexts to facilitate the discovery of parties’ mutual interest where unintermediated expressions of interest might themselves be harassing.

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An Economic Theory of Information Escrows

A familiar narrative of sexual harassment begins with a reluctant initial allegation of abuse that is quickly followed by other accusers stepping forward with similar allegations of mistreatment. A victim of abuse is reluctant to bring the first claim, in part because the accused routinely responds by trying to impeach the credibility of the accuser – characterizing the accuser as “a nut or a slut.”¹ This initial claim aversion is a rational concern. In a “he said/she said” credibility contest, an uncorroborated accusation of harassment is unlikely to prevail. Though initial accusations often inspire additional allegations from other victims which can serve to corroborate the initial claim, isolated claimants deciding whether or not to make the first accusation often cannot be sure whether other victims exist, and whether or not they will have the courage to make a supporting allegation. Victim reluctance to take on the risk of “going it alone” gives rise to the well-known concern that there might be a substantial underreporting of harassment.² Even recidivist harassers may go unchallenged because, among isolated victims, there can be a first-mover disadvantage to making the initial accusation. A challenge for public policy is to seek out ways to encourage victims of sexual harassment to take on the risks associated with making initial allegations.³

Of course, not all accusations are true. The standard narrative can also be read as suggesting that there may be too many accusations. Once one or two accusations of harassment are lodged – once there is blood in the water – it may become too easy for putative victims to make false, copy-cat accusations based on unsubstantiated accounts of alleged long-past events. While it may be comforting to infer guilt from the multiplicity of accusations, policy makers should also be concerned about whether accusation cascades of

¹ Susan Estrich, *Teaching Rape Law*, 102 YALE L.J. 509, 518 (1992). In a study conducted by the American Association of University Women (AAUW), the AAUW found based on student survey responses that only 7% of harassment victims on college campuses report incidents to a school employee, and that 35% of harassment victims do not discuss their experience with anyone. CATHERINE HILL & ELENA SILVA, AM. ASS’N UNIV. WOMEN, *DRAWING THE LINE: SEXUAL HARASSMENT ON CAMPUS* 32 (2006) [hereinafter AAUW REPORT].

² See, e.g., RANA SAMPSON, U.S. DEP’T OF JUSTICE, *ACQUAINTANCE RAPE OF COLLEGE STUDENTS* 4-5 (2002) (listing several reasons for victim underreporting, including “fear that the prosecutor will not believe them or will not bring charges”); Louise F. Fitzgerald, Suzanne Swan & Karla Fischer, *Why Didn’t She Just Report Him? The Psychological and Legal Implications of Women’s Responses to Sexual Harassment*, 51 J. SOC. ISSUES 117, 122-23 (1995) (listing concerns that “nothing can or will be done” as a reason for why some victims do not report sexual harassment, and documenting the low success rate of victims who ultimately litigate).

³ The stakes in this challenge are high, as the costs associated with continued harassment can be significant. As Chelsea R. Willness et al. argue in their 2007 meta-analysis of sexual harassment survey data, sexual harassment in the workplace appears to be negatively correlated with job satisfaction, employee productivity, and organization commitment, and positively correlated with task and job withdrawal. It also appears negatively correlated with employee mental and physical health, as well as life satisfaction, but positively correlated with Post Traumatic Stress Syndrome. Because employee job satisfaction and longevity are critical to organization success, these trends suggest that in addition to the harm sustained by the victim, sexual harassment harms the organization and its productivity significantly. Chelsea R. Willness, Piers Steel & Kibeom Lee, *A Meta-Analysis of the Antecedents and Consequences Of Workplace Sexual Harassment*, 60 PERSONNEL PSYCHOLOGY 127-62 (2007). In fact, a 1999 study of the costs of sexual harassment in the military suggests that in 1998 the costs to the U.S. Army associated with sexual harassment were well above \$US 250 million. The calculated costs included diminished employee productivity, administrative costs, transfer costs associated with job withdrawal (or termination), and costs directly related to complaints or suits. Faley, R. H., Knapp, D. E., Kustis, G. A., & DuBois, C. L. Z. *Estimating the organizational costs of sexual harassment: The organizational well-being case of the U.S. Army*. 13 J. of Bus. and Psych. 13, 461– 484. (1999). Though hard to predict precisely, both these study suggest that sexual harassment entails significant costs. Identifying and remedying ongoing harassment is critical to employee and organizational well-being.

potentially copy-cat complaints substantially enhance the likelihood of a guilty finding of harassment beyond the likelihood based on the evidence from initial allegation.

In this article, we redeploy the game-theoretic “information escrow” technique to make progress on the twin concerns of underreporting of initial truthful allegations and the possibility of overreporting of false copy-cat allegations. We propose the use of an allegation escrow to allow victims to transmit claims information to a trusted intermediary, a centralized escrow agent, who only forwards the information to proper authorities if (and only if) certain pre-specified conditions are met. Specifically, the escrow agent would keep confidential, unutilized and unforwarded harassment allegations until the agent received a pre-specified number of complementary harassment allegations concerning the same accused harasser. For example, if the escrow agreement specified the accumulation of two allegations as a triggering event, then the agent would wait until the escrow had received three separate allegations concerning a particular alleged harasser before forwarding the information to specified authorities and initiating a complaint on behalf of the three alleging parties.

An allegation escrow holds the promise of mitigating the first-mover disadvantage in making a complaint. A victim can place the first allegation into escrow with diminished fear that she will bear the sole brunt of the adversarial reaction, and with confidence that her escrowed allegation will be released only if accompanied with at least one other allegation against the same individual.⁴ Information escrows might thus secure more initial allegations because the alleging victim can rest assured that her initial allegation will only be seen if it is as part of a larger pattern of alleged misconduct.

More precisely and more subtly, an allegation escrow helpfully creates uncertainty for the victim whether she is making the initial allegation. At the time of placing an allegation into escrow, an alleging victim will not know whether any prior allegations against the same offender have already been placed into the escrow. This means that an accuser will not know at the time of making an escrowed accusation whether she is the first or second (and triggering) accusation. This incomplete information also helps respond to the copycat concern. Absent collusion among the allegers,⁵ investigating authorities need not be worried that later-in-time allegations placed in escrow were false copycats of an initial escrowed allegation, for the simple reason that the subsequent allegers would not know that an earlier allegation had been made.

Indeed, the possibility that different victims would independently – behind the veil of the escrow – allege similar details of harassment could enhance the credibility of each allegation. If multiple students independently escrowed allegations that a particular professor’s harassment included taking off his shoes, the very similarity of the professor’s modus operandi would be strong evidence that the allegations were true. In contrast, if it is widely known that a student accused a professor of sexual harassing her by inappropriately hugging her, then investigating authorities would need to consider whether subsequent complaints of inappropriate hugging by the same professor were triggered by reports of the first complaint. Besides the possibility of false follow-on allegations, there is also the

⁴ For the sake of simplicity, we refer to a victim of sexual harassment as “she,” and to the wrongdoer as “he.” Of course men are also victims of harassment, women are also aggressors, and harassment can occur within both genders. AAUW REPORT, *supra* note 1, at 2-3. Similarly, we discuss cases in which a professor is accused of harassing a student, when the reverse is also fairly common. Eric L. Dey, Jessica S. Korn & Linda J. Sax, *Betrayed by the Academy: The Sexual Harassment of Women College Faculty*, 67 J. HIGHER EDUC. 149, 157-61 (1996); Elizabeth Grauerholz, *Sexual Harassment of Women Professors by Students: Exploring the Dynamics of Power, Authority, and Gender in a University Setting*, 21 SEX ROLES 789, 789 (1989). Though we focus on the archetypal story of a male professor harassing a female student, the benefits and drawbacks allegation escrow apply to any combination of genders and hierarchical relationships.

⁵ We discuss the possibility of collusion below. *See infra* note 45 and accompanying text.

possibility that subsequent allegers were inappropriately primed by their knowledge of the first accusation to reinterpret the behavior of the accused as harassing.⁶

But allegations escrows are not a panacea. While escrows hold the potential for mitigating the twin concerns of initial underreporting of truthful allegations and subsequent overreporting of false allegations, this article will also take on a variety of ways that placing an intermediating escrow mechanism between allegers and investigating authorities might be counterproductive. Most importantly, we will consider circumstances where allegation escrows may reduce the sheer quantity of actionable complaints. In a world with escrows, some victims' complaints will never exit the escrow mechanism. Victims retain the right to go it alone by directly lodging a complaint even if they have previously placed an allegation in escrow. Indeed, we will discuss ways that escrows can be designed to encourage and facilitate subsequent opportunities to convert escrowed allegations into independent go-it-alone complaints. But there remains the possibility that an escrow system will leave some harassment uninvestigated and some harassers undeterred. Even if on net escrows increase the quantity and quality of deterrence, some unpaired escrow allegations would remain forever impounded. An important goal of the subsequent analysis is to determine circumstances when the benefits of escrows outweigh their costs.

Allegation escrows come in many shapes and sizes. In the following sections, we will discuss a variety of design issues (including more detail on triggering events, interim reporting, and matching criteria) and legal issues (including the legal relationship between the escrow agent and the escrow depositors, and what duties, if any, are owed to the accused). We will also show that information escrows might be applied to many different types of information. At least conceptually, allegation escrows can be applied to almost any context where victims experience claim aversion because of a reluctance to go it alone.⁷ As we'll see, allegation escrows might be used at the workplace not only to respond to instances of sexual and racial harassment, but as a complementary tool to protect whistleblowers in make allegations concerning corporate or government misconduct.

Outside of the workplace, escrows might be put in place to respond to allegations of date rape where claim aversion similarly leads to well-recognized problems of underreporting.⁸ Indeed, we'll see that it would even be possible to create "suspicion escrows" where mere suspicions of adultery or other misconduct could, if matched, be disclosed. While promoting the reporting and potential forwarding of mere suspicions carries its own particular ethical and policy concerns, the lens of suspicion escrows also clarifies that information escrows might produce benefits with respect to allegation uncertainty. An additional reason for reluctance to be the first person to make an allegation is that potential allegers can be sincerely uncertain about whether someone else has participated in wrongdoing. A person may have received an ambiguous signal that a family friend is

⁶ As we will discuss below, *see infra* at 10, there will be times when the follow-on allegations based on triggered reinterpretation of the past is a good thing ("The professor took off his shoes in my office."). We will also discuss, *infra* at 11 how escrows can make help when individuals are uncertain about whether they are victims. But the main point is that a series of similar escrowed allegations have a different and stronger evidentiary meaning than an identical series of un-escrowed allegations, because the escrowed claims are unprimed.

⁷ *See, e.g.*, Brian Martin, *Whistleblowing and Nonviolence*, 24 PEACE & CHANGE 15, 19-20, 23 (1999) (Noting how in the whistleblowing context, "isolated resistance is ruthlessly crushed," and suggesting that whistleblowers would gain much from mobilizing and working together with other whistleblowers); *see also* William L.F. Felstiner, Richard L. Abel & Austin Sarat, *The Emergence and Transformation of Disputes: Naming, Blaming, Claiming...*, 15 LAW & SOC'Y REV. 631 (1980) (identifying other barriers to victim's bringing claims).

⁸ *See, e.g.*, SAMPSON, *supra* note 2, at 4; *see also* Ian Ayres & Katharine K. Baker, *A Separate Crime of Reckless Sex*, 72 U. CHI. L. REV. 599, 637 (2005).

committing adultery and feel she does not have an adequate basis for causing the disruption that conveying the suspicion to the potentially aggrieved spouse might eventuate. But this same person might feel differently if two other people independently had the same or stronger inklings of infidelity for the spouse in question. Indeed, at times even the victims of date rape may be uncertain about whether what transpired through the blur of alcohol or drugs was sufficiently nonconsensual to warrant a direct complaint,⁹ but nonetheless be willing to escrow a date rape allegation that would only be forwarded if it turned out that the person in question engaged in a pattern of similar behavior.

This article will even show that the idea of information escrows can be deployed to intermediate communications that might themselves otherwise be harassing. We will show how “shared-interest escrows” can be used in the workplace to allow employees to explore the possibility of consensual relationships while avoiding the burden to the rejecting party when a dating interest is unrequited. A workplace “dating escrow” mechanism might require that an employee express a dating interest in the escrow, rather than by direct communication. As before, the escrowed information would remain uncommunicated unless a pre-specified triggering event occurs. If and only if a matching expression of interest is received, the escrow agent informs both people that they are interested in dating each other. Dating escrows of this kind have been in use for several years at websites (such as www.goodcrush.com) and at colleges (such as Yale and Harvard) which put on “last chance dances” giving graduating seniors a mechanism to finally connect with people they have secretly admired.¹⁰ We’ll show that dating escrows not only aid the shy, but usefully prevent common knowledge when one person’s interest is unrequited. At the work place, this latter effect is especially important because it avoids the awkwardness of two co-workers each knowing that one has rejected the other’s advances. We’ll also show that shared-interest escrows analogously can be deployed to intermediate attempts by adopted children to connect with their biological parents (or vice versa).

In the end, we will conclude that the case for deploying information escrows is stronger in some places than others. The mere fact that an information escrow attracts deposits does not mean that it is valuable to society. Allegation escrows might unhelpfully reduce deterrence by converting what would have been unintermediated complaints into escrowed allegations. Shared-interest escrows might facilitate the discovery of requited interest in socially deleterious activities or even criminal conspiracies. Allegation escrows are most likely to be valuable when the un-escrowed equilibrium includes underreporting of truthful allegations and when wrong-doing is likely to be known by more than one person. Interest escrows are more likely to be valuable when an unintermediated communication would be unwanted or when common knowledge of unilateral interest would damage a pre-existing relationship. Our weighing of the pros and cons suggests that allegation escrows for college sexual harassment and shared-interest escrows for consensual relationships are particularly strong candidates for productive deployment of the escrow mechanism.

The remainder of the article is organized into three parts. Part I discusses the game-theoretic underpinnings of information escrows and the connections between settlement escrows and other mechanisms that intermediate communication. It lays out the conditions under which allegation and interest escrows are likely to improve the equilibrium that would exist with unintermediated communication. Part II then applies this theory to the facts on the

⁹ See Bonnie S. Fisher, et al., *Reporting Sexual Victimization to the Police and Others: Results from a National-Level Study of College Women*, 30 CRIM. JUSTICE & BEHAVIOR 6 (2003).

¹⁰ See Nicholas Zamiska, *Before Graduation at Yale, a Last Chance for Romance*, N.Y. TIMES, May 30, 2004, <http://www.nytimes.com/2004/05/30/nyregion/before-graduation-at-yale-a-last-chance-for-romance.html>; see also *infra* note 107 and accompanying text (discussing the use of shared-interest escrows in contexts such as the “last chance dances”).

ground to assess whether information escrows are likely to be valuable in close to a dozen different contexts. It also focuses more directly on the legal structure of escrow relationships in different contexts and the legal consequences of both communicated and uncommunicated escrow information.

Part III then more closely analyzes the legal and non-legal question that would confront real-world implementation of an allegation escrow. Our interest in the design and legality of information escrows is more than academic. In parallel with the writing of this article, we are developing a non-profit website, www.allegationescrow.org, which we plan to launch in 2012. Initially, the site will be dedicated to escrows concerning sexual harassment at a small set of pre-selected universities. Instead of facing the traditional dilemma of whether to file a direct complaint or remain silent, the website will give victims of sexual harassment a third option of creating an escrowed allegation. We plan to put into practice and ultimately test the theories that we have developed here.

I. A THEORY OF INFORMATION ESCROWS

A. *Information Escrows As Intermediated Communication*

We begin by providing a functional typology of information escrows and their relationship to the previous literature. Most basically, an information escrow is a mechanism of conditional, *intermediated* communication. Information escrows allow the user to deposit information into an escrow lockbox with instructions to the escrow agent that the information only be released to pre-specified recipients under pre-specified circumstances. While one can imagine instructions that give escrow agents some discretion about when to release the information, real world applications of information escrows tend to follow the structure of financial escrows by attempting to eliminate the discretion of the agent.¹¹ Escrow agents need to be trusted, but their function tends to be largely ministerial. While bilateral contracts and the law itself can create duties of conditional disclosure, information escrows are mechanisms for intermediated disclosure that necessarily entail the participation of a third-party intermediary who holds the escrowed information.

At first, it might seem that intermediation would reduce the quantity and quality of transmitted information. After all, the escrowing of information necessarily represents a delay in the transmission relative to unintermediated, immediate communication. Moreover, some of the escrow applications – including both the allegation and shared-interest escrows described above – create the possibility of orphaned escrow deposits that remain eternally locked in escrow because the requisite conditions for release are never met. Nonetheless, information escrows can support equilibria which end with more, higher quality and even faster disclosure of information. Though it may seem that delaying, potentially indefinitely, the release of information would degrade the equilibrium quality of communication, contexts in which the amount and quality of information transmitted are not constant could see an overall increase in equilibrium quality. When people are reluctant to be the first person to make an allegation or express interest – in short, when there is a first-mover disadvantage to unintermediated communication, then intermediating information escrows can induce a more informed equilibria. A world with delayed and even orphaned escrow deposits can still have more communication simply because the escrow might encourage many who would have

¹¹ Escrow mechanisms, however, at times, give escrow agents discretion on whether they will accept information deposits. For example, as discussed *infra* note 17 and accompanying text, bills have been proposed where convicts may have to petition a court conditionally to expunge a criminal conviction.

been unwilling to disclose directly to communicate indirectly¹².

There are at least four different functional classes of information escrows. The bulk of this article will be devoted to what we call allegation escrows and shared-interest escrows. But before turning to the history and structure of these devices, we pause briefly to mention the functions of two other types of information escrows, which we've named commitment escrows and posthumous escrows.

In a commitment escrow, the depositor puts into escrow embarrassing or incriminating information that will be released if the depositor fails to keep a commitment. For example, in 1971, the Nobel-prize winning economist Thomas Schelling wrote about a Denver addiction clinic that used "self-blackmail as part of its therapy":

The patient may write a self-incriminating letter that is placed in a safe, to be delivered to the addressee if the patient, who is tested on a random schedule, is found to have used cocaine. An example would be a physician who writes to the State Board of Medical Examiners confessing that he has violated state law and professional ethics in the illicit use of cocaine and deserves to lose his license to practice medicine.¹³

In this example, the clinic is the escrow agent with a literal lockbox that will only be opened if the depositor fails to keep his commitment. While depositors to dating escrows hope that the conditions of escrow are fulfilled, the depositor to a commitment escrow hopes that the conditions of escrow release are *not* fulfilled.¹⁴ Similarly, in 2006, Barry Nalebuff designed a weight-loss experiment for ABC's *Primetime*, in which five overweight people deposited with producers (here, escrow agents) unflattering individual photographs of themselves in skimpy bathing suits with the understanding that the photographs would be broadcast on national television if the participants failed to lose 15 pounds over the next two months. One participant worried that he wouldn't be sufficiently self-conscious about having his overweight picture shown on TV, and so he also deposited into escrow an unflattering photograph of his spouse as additional commitment motivation.¹⁵

Commitment escrows are implemented on a much broader scale in criminal databases which conditionally expunge criminal records. Notwithstanding the name, expungements do

¹² The unintuitive possibility that giving people an option of impeded communication would produce a more informed equilibrium parallels an argument made by Jennifer Brown and Ian Ayres in discussing the information-filtering role of caucus mediation mechanisms:

Our provocative conclusion is that commitments to add imprecision to the privately disclosed information can improve the quality and increase the quantity of the information ultimately communicated. Even though it seems that adding noise would decrease the amount of information communicated, this result is only true if one mistakenly assumes that the amount and quality of the information disclosed to the mediator remains constant. Commitments by a mediator to imprecisely translate the private disclosures of one party can induce that party to make more precise disclosures to the mediator.

Jennifer Brown & Ian Ayres, *Economic Rationales For Mediation*, 80 VA. L. REV. 323, 357 (1994).

¹³ Thomas C. Schelling, STRATEGIES OF COMMITMENT AND OTHER ESSAYS 79 (2006); *see also* IAN AYRES, CARROTS AND STICKS: UNLOCK THE POWER OF INCENTIVES TO GET THINGS DONE 86-89 (2010) (discussing the Denver addiction clinic and other examples of self-blackmail).

¹⁴ It would be possible to create a commitment escrow with information that the depositor wants to be communicated but will only be released by the escrow agent if the depositor achieves some pre-specified goal. For example, a commitment escrow might specify that a desired proposal of marriage will only be forwarded if the depositor loses ten pounds. We have not encountered these "carrot commitment escrows" in practice, though.

¹⁵ One could easily imagine the commitment website, stickK.com, giving users the option of depositing into escrow embarrassing information that will only be released to the public or to pre-specified email addresses if the users fail to achieve their committed goal. The potential disclosure of some wrong-doing would be an additional layer of accountability that might powerfully motivate users to lose weight or complete a dissertation or business plan.

not erase information from the criminal justice database but instead place the information under seal.¹⁶ Some jurisdictions make the non-use of expunged convictions conditional on the convict avoiding any additional crime for some period in the future.¹⁷ Conditional expungements are forms of commitment escrow, where government is the escrow agent threatening to release unwanted information if the convict recidivates.

Game-theorists have also imagined the use commitment escrows to overcome a kind of criminal's dilemma. Imagine that Todd catches his friend Sarah red-handed having just committed murder most foul. Sarah reluctantly feels compelled to kill her friend to make sure he doesn't rat her out to the police. But before she kills again, Todd might disclose to her an equally incriminating piece of information against him that she can also reveal.¹⁸ In this example, Todd, to save his life, has created a commitment escrow, making Sarah his escrow agent.

A second broad class of information escrow mechanisms concerns the posthumous disclosure of information. Presidents, Supreme Court Justices and other public figures may deposit into an archive information that will only be disclosed in the future after the death of certain people and/or the passage of a pre-specified number of years.¹⁹ Unlike commitment escrows, where the depositors hope that the information is never released, posthumous escrows seek to ensure the eventual disclosure of the information. The goal of such posthumous escrows is both to preserve the deposited information and to make sure that the ultimate release of the information is not disrupted by the death, disability, or changed preferences of the information depositor. Anna for example may intend to tell Henry when he turns twenty that he is not her biological son, but she may be worried not only that she may be unable to make the future disclosure, but that she will be unwilling to make the disclosure. A depositor's present self may worry that her future self will have different preferences or insufficient willpower to make the disclosure she currently desires, particularly of sensitive information. Placing the information with a trusted, long-lived intermediary can reduce these risks.²⁰

¹⁶ Michael D. Mayfield, *Revisiting Expungement: Concealing Information in the Information Age*, 1997 UTAH L. REV. 1057, 1057 (1997); Fruqan Mouzon, *Forgive Us Our Trespasses: The Need for Federal Expungement Legislation*, 39 U. MEM. L. REV. 1, 5 n.15 (2008).

¹⁷ See, e.g., California Penal Code § 1203.4 ("However, in any subsequent prosecution of the defendant for any other offense, the prior conviction may be pleaded and proved and shall have the same effect as if probation had not been granted or the accusation or information dismissed."); H.B. 5393, 92d Leg., Reg. Sess. (Mich. 2003) (bill proposing expungement conditional on no subsequent convictions for four years); MICH. COMP. LAWS § 712A.18e (2011) (providing for expungement of juvenile criminal record for one-time offenders lacking felony convictions).

¹⁸ See, e.g., THOMAS C. SCHELLING, STRATEGIES OF COMMITMENT AND OTHER ESSAYS 11 (2006) [*hereinafter* SCHELLING, COMMITMENT]. This type of dynamic may also be seen in the kidnapping context, where "[b]oth the kidnapper who would like to release his prisoner, and the prisoner, may search desperately for a way to commit the latter against informing on his captor." THOMAS C. SCHELLING, STRATEGIES OF CONFLICT 43 (1960); see also Monika Nalepa, *Infiltration As Insurance: Committing To Democratization and Committing Peace*, in LAW IN PEACE NEGOTIATIONS 121, 129-30 (Morten Bergsmo & Pablo Kalmanovitz eds., 2d ed. 2010) (laying out the "Kidnapper's Dilemma," which may be solved if the victim "leaves a skeleton in the kidnapper's closet"). A downside of being without sin is that you may not have the means to resort to this protective strategy. People who have ignoble secrets have something to exchange. *But see, e.g.*, SCHELLING, COMMITMENT, *supra*, at 11 ("In 'Wet Saturday,' a John Collier story produced on the old Alfred Hitchcock television series, the local priest, taking a shortcut home, stumbles on a girl's father dropping down the well the body of the man she just killed. The priest is given a choice: join the body down the well or leave his handprints on the murder weapon, which will be kept as security by the girl's father. The priest 'promises' by grasping the axe handle firmly.").

¹⁹ Adam Clymer & Don Van Natta Jr, *Family of Robert F. Kennedy Rethinks His Place at Library*, N.Y. TIMES, July 11, 2011, http://www.nytimes.com/2011/07/12/us/12rfk.html?_r=2&ref=todayspaper&pagewanted=all.

²⁰ Time capsules are another example of posthumous escrows which allow the depositors to preserve the deposited information and to communicate with the future generations. However, the capsule is an imperfect

Legal wills themselves can serve some of these functions.²¹ For example, it might only be at the posthumous reading of a last will and testament where the decedent's attorney (qua escrow agent) for the first time discloses that the decedent has not in fact graduated from college or that the decedent long ago fathered a child. A website, www.justincaseidie.com, provides a posthumous escrow service to help clients send time-delayed messages:

[T]here's probably loads of things you would like people to know ("I love you" / "The safe combination is 1432" / "I always thought you smelt of fish") that you simply can't bring yourself to saying whilst you're still alive to suffer the consequences. Imagine the freedom of knowing that they'll only find out if you never return from your trip to Spain!²²

Some of the site's suggested uses are closer to commitment escrows, but seek to commit a third-party from taking an unwanted action:

Going on a blind date? Not sure if he's a mass murderer? Drop an email to help@police.com with his name and address, safe in the knowledge that if true love blossoms, you can safely log in and stop the message!²³

The website ingeniously presumes by default that the depositor has died and automatically sends the message to the pre-specified e-mail address unless the register depositor subsequently logs on to prevent the transmission.

Another kind of posthumous escrow that helps ensure disclosure of information regardless of potential changed future preferences of the depositor is called the "software escrow" (also called source code escrow) and is in widespread use in business. A software escrow, for instance, might require a software developer to place in escrow the uncompiled code of a program that has been specifically tailored for use by a licensing business.²⁴ The escrow agent would only release the code to the licensing business if the developer declared bankruptcy or if other pre-specified events occur.

B. Using Allegation Escrows to Mitigate Initial Claim Aversion

A third class of information escrow, and one that is a central focus of this Article, concerns allegation escrows. As introduced above, allegation escrows allow people to place actionable claims into escrow that will only be filed against a potential defendant by an escrow agent if a pre-specified number of allegations are lodged against the same defendant. The central function of allegation escrows is to respond to the possibility that there will be a first-mover disadvantage in claiming. This section will argue that in some contexts, such as sexual harassment, our central motivating example, there will be victims who want to make a claim and are willing to file follow-on claims, but who nonetheless are unwilling to be the first, and potentially only, person to make a claim against a wrongdoer. A first-mover disadvantage of this kind can make the sexual harassment complaint processes akin to a

escrow agent – because intervening generations may choose not to honor the depositor's intention and open the capsule before the appointed time. See *Easy A* (Screen Gems 2010) (embarrassing information in a time capsule is opened ahead of schedule).

²¹ A future testator may revoke a prior will and leave the information undisclosed.

²² JUSTINCASEIDIE.COM – YOU DIE, THEY FIND OUT, <http://justincaseidie.com/> (last visited Nov. 22, 2011).

²³ See also Frederick Forsyth, *The Day of the Jackal* 61-63 (1971) (describe how person who made gun for assassin used escrow to make sure he wasn't killed by assassin by giving letter to others to be opened if he doesn't come home alive).

²⁴ This is also known as "source code escrow." For a discussion of source code escrow and a summary of arguments for and against its use, see Walter D. Denson, *The Source Code Escrow: A Worthwhile or Worthless Investment?* 1 RUTGERS BANKR. L.J. 1 (2002). There are several companies that provide such services, such as EscrowTech International, ESCROWTECH INTERNATIONAL, INC., <http://www.ironmountain.com/ipm/escrow> (last visited Oct. 6, 2011), one of the leading source code escrow companies.

variety of other strategic contexts that exhibit “excessive inertia.”²⁵ Sexual harassment can produce a kind of “claimant’s dilemma” – a dynamic version of the classic prisoner’s dilemma, where victims of sexual harassment prefer for multiple claims to be made, but each victim chooses to defect by not filing a claim. In the original prisoner’s dilemma, the two prisoners are separate so that they cannot try to coordinate their behavior. But the claimant’s dilemma in some ways is even more severe because a sexual harassment victim often does not know the identity of other victims, or indeed whether there are any other victims.

Economists refer to games with this kind of first-mover disadvantage as exhibiting the “penguin problem” based on the stylized interaction of a flock of penguins trying to fish:

Hungry penguins gather at the edge of an ice floe, reluctant to dive into the water. There is food in the water, but a killer whale might be lurking, so no penguin wants to dive first. In such circumstances, individual rationality may lead a group to forfeit attractive opportunities, for example, a predator-free meal or an innovative new networked product.²⁶

In such circumstances, “no one moves unless [someone else moves first], so no one moves.”²⁷ A recidivist sexual harasser’s wrong doing might go unchallenged because no one is willing to be the first (and potentially only) claimant to lodge a complaint.²⁸

But why exactly would victims of sexual harassment be more reluctant to bring an initial claim than a follow-on claim? We suggest that there are at least two related reasons. First, follow-on claimants face a reduced risk of retaliation. A lone claimant’s credibility is more susceptible to attack. Initial claimants are more likely to be characterized as “nuts or sluts” who have either fantasized or fabricated their harassments. Sexual harassment claims are a circumstance where claimants can find some measure of safety in numbers. A lone claimant of sexual harassment often presents adjudicators with a “he said/she said” choice of either crediting the account of the accuser or the accused. This credibility contest can become stacked in the harasser’s favor if the harasser has intentionally preyed upon weak or vulnerable victims who may worry that their allegations will not be believed. Even without overt retaliation, initial claimants run the reputational risk that their contested claim will be rejected. In contrast, a follow-on claim creates presents the adjudicator with a “he said/they said” choice. As the size of the claimant pool increases, it may become more difficult for the accused to argue that the claimants are all crazed or disgruntled. A central risk to bringing an initial claim is that an initial claimant often cannot be sure that follow-on claimants will materialize to lend credence to her initial claim.²⁹

²⁵ Joseph Farrell & Garth Saloner, *Installed Base and Compatibility: Innovation, Product Preannouncements, and Predation*, 76 AM. ECON. REV. 940 (1986).

²⁶ Thomas R. Eisenmann, *Platform-Mediated Networks: Definitions and Core Concepts*, Harvard Business School Module Note, Sept. 13, 2006 (discussing Farrell & Saloner, *supra* note 25).

²⁷ Vince Kuraitis, *Overcoming the Penguin Problem: Setting Expectations for EHR Adoption*, E-CARE MANAGEMENT BLOG (Aug. 2, 2009), <http://e-caremanagement.com/overcoming-the-penguin-problem-setting-expectations-for-ehr-adoption>.

²⁸ And, as recent and disturbing examples such as the former Penn State coach Jerry Sandusky (which we describe in detail below) indicate, the need to mitigate against these first-mover disadvantages is real and urgent. If the allegations against Sandusky are true, many boys endured years of sexual abuse at the hands of an oft-repeat offender. It wasn’t until a first-mover finally made some of the charges sufficiently public, years after the alleged abuse began, that the full scope of the allegations became known. See *infra* note 133 and accompanying text.

²⁹ And even when follow-on claimants do come through, the first accuser often nevertheless experiences relatively greater overt and reputational harm.

A second and subtler reason for initial claim aversion is that some potential claimants may be uncertain about whether what they experienced was in fact harassment.³⁰ A student, for example, might be uncertain whether a professor's lingering hug crossed the line. This uncertainty might turn on whether a reasonable student would find the hug unwanted or on whether the professor possessed the requisite mens rea to make the act wrongful in the claimant's mind (regardless of whether it was sufficient for the law). However, this same student might feel very differently about bringing a follow-on claim upon learning that other students had also found the professor's behavior objectionable. In short, waiting to be a follow-on claimant can reduce "wrongdoing uncertainty." Potential claimants will experience different degrees of wrongdoing uncertainty – in part because of differences in their own disposition, but especially because of differences in the type of wrongdoing they have experienced. Blatant forms of quid pro quo or sexual assault are unlikely to leave a victim uncertain that a harm has been perpetrated. But at times, even the victims of acquaintance rape report being uncertain about whether a sexual encounter was sufficiently non-consensual.³¹ Victims may find follow-on complaints to be more attractive than first-mover allegations because knowing that others have found similar actions by the accused to be wrongful can increase a claimant's confidence in her own claim.³²

1. Modeling the Impact of Escrows on the Communication Equilibrium

If all of the potential victims of a harasser hesitate because of retaliation risk or wrongdoer uncertainty to bring an initial claim, then the harassment of even repeat-offenders may go unchallenged. The first-mover disadvantage to claiming can lead to the oft-reported underreporting problem.³³ Allegation escrows can mitigate the first-mover claiming disadvantage because escrows can reduce retaliation risk, reputational risk, and wrongdoer uncertainty. A victim making a deposit to an allegation escrow does not know whether she is the first victim to make such a deposit, but she can rest assured that her complaint will only be passed onto authorities if at least one other person has lodged a similar complaint. Instead of forcing a claimant to decide whether she wants to make a claim before or after potential fellow victims, allegation escrows allow victims to make what is informationally equivalent to simultaneous claims. Even though the escrow will receive allegations over time, the escrow agent will only release them simultaneously.

A claimant can further rest assured that, if her complaint is forwarded, it will not just be her word against that of the accused. She will know there will only be a formal complaint if and only if at least one other person found something about the accused's conduct worthy of investigation. At the time of making the allegation, she will not know whether there are other claimants, but she will know that she will not be alone in any formal complaint that is filed. Accordingly, some sexual harassment victims who would have preferred silence to filing an initial complaint may be willing to deposit their allegation in escrow.

But to be clear, there is no a priori reason why giving victims the escrow option will increase the number of harassment investigations. In a world with escrows, some victims who would have been willing to go it alone and file an initial allegation will instead prefer to place that allegation in escrow. Some of these escrow allegations will never see the light of day. Indeed, one-off harassers unambiguously face less risk of investigation as long as there

³⁰ See AAUW REPORT, *supra* note 1, at 38.

³¹ Bonnie S. Fisher, et al., *supra* note 9, at 8.

³² Similarly, in less egregious cases of harassment, complainants may be more willing to excuse a harasser if the harassment appears to be a one time incident or mistake. Knowledge of repeated episodes might thus make complainants both more certain of and more offended by improper behavior.

³³ See AAUW REPORT, *supra* note 1, at 32-33 (discussing underreporting by students).

is some probability that their sole victim will make her claim ineffectual by sending it into escrow. The case for allegation escrows will be weaker if a larger proportion of escrow users would otherwise be willing to go it alone with initial unescrowed claims, or if a smaller proportion of harassers are repeat offenders.

To explore more precisely the circumstances under which the escrow option will increase the probability of lodged complaints, this section analyzes a highly-stylized model of sexual harassment in a university setting. First, imagine a 3-stage harassment/claiming game without escrows. In the first stage, professors have an opportunity to harass 0, 1, 2, 3, or 4 students. In stage 2, victims of harassment have the option of remaining silent or simultaneously bringing independent claims.³⁴ In stage 3, victims who remained silent in stage 2 can bring follow-on complaints. This model requires parameters for:

- F(x) the probability that a professor at the school will harass $x = 0, 1, 2, 3,$ or 4 students,
- p_d the probability that a victim will bring an initial stage 2 *direct* complaint; and,
- p_f the probability that a victim, who was silent in stage 2 but sees that a complaint was filed in stage 2 against her harasser will bring a stage 3 *follow-on* complaint.

This simple model captures two stylized facts about harassment claimants: (i) not all victims are willing to file initial claims ($p_d < 1$); and (ii) some victims who are not willing to bring initial claims, are willing to claim if they learn that another claim has been filed against their harasser ($p_f > 0$). With values for these parameters, it is possible to simulate the probability that a harassing professor will be investigated.

To construct an alternative world in which escrows are allowed, assume that in stage 2 victims have the additional option of filing their allegation in escrow. If at least the triggering number of escrowed allegations are lodged against a professor in stage 2, then the escrow agent makes the professor's identity public by formally lodging a complaint. In stage 3 previously silent victims may come forward and file follow-on complaints to either the stage 2 direct complaints or the stage 2 escrowed allegations that have reached the requisite numerosity for release. To simulate this escrow alternative, we need to additionally provide parameter values for:

- T the number of escrowed allegations against a specific professor that triggers the release of those escrows in stage 2,
- α_d the proportion of victims who in a world without escrows would have filed direct claims in stage 2 but in a world with escrows choose to escrow their allegations; and,

³⁴ In the real world, harassment takes place over time and victims choose over time whether to file complaints. However, to allow for more tractable estimation, we've assumed that the harassment takes place in an initial stage that might span five years, while victims (uninformed about whether other students were harassed by the same professor) must simultaneously and independently choose whether to file an initial complaint. While the assumption of simultaneity abstracts from reality, many universities keep the identity of harassment defendants nonpublic, see discussion *infra* accompanying notes 35 and 36, so that students are often uninformed about whether a prior complaint has in fact been filed – which creates an analogous strategic setting for potential complainants.

α_s the proportion of victims who in a world without escrows would have remained silent in stage 2 but in a world with escrows choose to escrow their allegations.

Producing plausible values for these parameters is no easy task, as estimates about victim preferences in an as of yet counterfactual world in which escrowed reporting is available is, of course, speculative at best. As a starting point, we relied on the wisdom of the crowd, asked a mixture of professors and students for their assessment, and simulated the equilibrium with and without the escrow option using the median response for each parameter.

Table 1 reports the results of this simulation and shows that for these assumed parameter values that the escrow option increases both the probability that a harassing professor will be investigated and the quantity of evidence that will be available at the investigation:

Professor Type (i.e., number of students harassed)	With Escrow				Without Escrow			Percent Improvement (With Escrow Relative to Without Escrow)		
	Prob. Harrassing Prof. Will be Investigated	Expected Number of Complaints Per Investigated Prof After Stage 2	Expected Number of Complaints Per Investigated Prof After Stage 3	Prob. that Escrow will be Orphaned	Prob. Harrassing Prof. Will be Investigated	Expected Number of Complaints Per Investigated Prof After Stage 2	Expected Number of Complaints Per Investigated Prof After Stage 3	In Probability Harassing Professor Will Be Investigated	In Expected Number of Complaints Per Investigated Professor After Stage 2	In Expected Number of Complaints Per Investigated Professor After Stage 3
1	9.5%	1.00	1.00	100.0%	10.0%	1.000	1.000	-5.0%	0.0%	0.0%
2	20.1%	1.14	1.29	86.0%	19.0%	1.053	1.242	5.6%	8.6%	3.7%
3	30.7%	1.29	1.59	74.0%	27.1%	1.107	1.486	13.1%	16.2%	6.8%
4	40.7%	1.44	1.90	63.6%	34.4%	1.163	1.731	18.3%	23.4%	9.6%
Weighted Average	31.2%	1.35	1.71	74.0%	27.3%	1.13	1.58	14.4%	19.5%	8.9%

Based on simulation described in accompanying text with $F(1)=.01$; $F(2)=.03$; $F(3)=.03$; $F(4)=.06$; $p_d=.1$; $p_r=.2$; $T=2$; $\alpha_d=.05$; & $\alpha_s=.15$.

For example, Table 1 shows that in a world without escrows, harassing professors faced on average a 27% chance of being investigated, but that with escrows this probability increases to 31% – a 14.4% increase. The table shows, however, that the probability of investigation varies for different types of professors. Professors who harass fewer students have a smaller chance of being investigated. We can also see the counterproductive impact of the escrow option with regard to professors who harass only a single student. These one-off harassers face a 5% lower probability of being investigated in a world with escrows than without, because in this simulation 5% of victims who would have brought a direct claim choose instead to file an escrow claim that never sees the light of day.

Table 1 also shows that giving victims the escrow option increases the expected number of complaints per investigation. We see in particular that the expected number of complaints increases for professors who harass more students. For example, without escrows, one-off harassers who are investigated will face just one complaint, while those who harass 4 students and are investigated can expect to face 1.44 complaints after the second stage (based on the possibility of multiple direct complaints), and 1.9 complaints after the third stage (based on the possibility of follow-on suits). The number of suits after the third stage seems the most policy relevant because it represents the total set of claims for

investigation. But as we mention below,³⁵ many university policies on the identity of accused harassers are opaque, and there is little inter-school consistency with respect to the accused's right to confidentiality during and after a formal investigation³⁶. Failure to publically disclose the identity of the accused effectively forecloses the opportunity for follow-on claims, unless the initial claimants are willing and able to publicize their claim. In such situations, the expected number of claims after stage 2 becomes a more relevant measure of the expected evidence that will be available to investigators.

Table 1 also shows the potential value of giving victims the escrow option. The escrow option increases the expected number of complaints after stage 3 by nearly 9% and after stage 2 by nearly 20%.³⁷ The escrow option in this example thus increases both the probability of investigation and the expected quantity of evidence that is before the investigator. But this simulation at most suggests the possibility that escrow regimes can enhance the probability of deterrence. Our admittedly crude model does not allow for the possibility of false claims, and makes a host of other restrictive assumptions.³⁸

Nonetheless, the exercise is instructive because it may provide a heuristic sense of how the results would be impacted by alternative assumptions. For example, Table 1 also calculates the proportion of escrow complaints that remain unmatched and unreported, or what we call "orphaned." We see that 100% of escrow complaints lodged against one-off harassers are orphaned, and though this percentage declines for recidivist harassers, the overall probability that an escrow claimed will be orphaned is nearly 75%. If the simulation is re-estimated with a trigger of 3, this probability balloons to 97.1% while the probability of harasser investigation falls by 2.7%. Theory is agnostic about the appropriate trigger. But our exploration of hundreds of alternative parameter values suggests to us that a trigger of 2 is likely to produce better results than a higher trigger.³⁹

The model also helps illustrate that giving victims the escrow option is not always a good idea. Table 2 re-simulates claiming and investigating assuming the same parameter values as in Table 1, except increasing the probability that a victim will bring a direct complaint (p_d) from 10 to 70%.⁴⁰

³⁵ See JASMINA BESIREVIC-REGAN, YALE UNIVERSITY, REPORT OF THE COMMITTEE ON SEXUAL HARASSMENT AND ASSAULT PREVENTION EDUCATION IN YALE COLLEGE app. 1 (providing a comprehensive survey of reporting policies of various schools).

³⁶ For one school policy that deals explicitly with the privacy rights of the accused and the general interest in confidentiality, see the Brown Sexual Harassment Policy at:

<http://www.brown.edu/Administration/diversity/documents/SexualHarassmentPolicy.pdf>

³⁷ After stage 3, the escrow advantage declines because the larger proportion of silent victims in the "no-escrow" regime catch up by bringing more follow-on claims.

³⁸ For example, the simulation does not allow for different propensities of silent victims to file stage 3 follow-on claims in escrow and no-escrow regimes. We also hold the distribution of harassing professors constant in the two regimes, even though the higher likelihoods of investigation and higher number of expected claims might deter some recidivist harassers. We also assume perfect or nearly perfect information with respect to reporting options. Relatedly the necessary publicity might inform some professors that their behavior is reportable, and potentially deter their harassing behavior.

³⁹ It is of course possible that a higher trigger will induce more silent victims to file escrowed allegations. However, our investigation suggests that the increased probability of converting "silents" to "escrows" would have to be unreasonably large to offset the increased orphaning effect of a larger trigger. For example, we estimate, using the parameters of Table 1, that α_s would need to approach 36% (more than double our current assumption) in order to offset an increase in the trigger from 2 to 3.

⁴⁰ Available survey data suggest that 10% is closer to reality, but the sensitive context and vast secrecy make accurate estimates difficult. See AAUW REPORT, *supra* note 1, at Figure 10, page 33. The purpose of the table is to make clear that for certain parameter values the escrow option would degrade the information equilibrium.

		With Escrow			Without Escrow			Percent Improvement (With Escrow Relative to Without Escrow)		
Professor Type (i.e., number of students harassed)	Prob. Harrassing Prof. Will be Investigated	Expected Number of Complaints Per Investigated Prof After Stage 2	Expected Number of Complaints Per Investigated Prof After Stage 3	Prob. that Escrow will be Orphaned	Prob. Harrassing Prof. Will be Investigated	Expected Number of Complaints Per Investigated Prof After Stage 2	Expected Number of Complaints Per Investigated Prof After Stage 3	In Probability Harrassing Professor Will Be Investigated	In Expected Number of Complaints Per Investigated Professor After Stage 2	In Expected Number of Complaints Per Investigated Professor After Stage 3
		1	66.5%	1.00		1.00	100.0%		70.0%	1.000
2	89.4%	1.50	1.58	92.0%	91.0%	1.538	1.631	-1.7%	-2.4%	-3.3%
3	96.8%	2.10	2.24	84.6%	97.3%	2.158	2.327	-0.5%	-2.7%	-3.7%
4	99.0%	2.76	2.96	77.9%	99.2%	2.823	3.058	-0.1%	-2.3%	-3.3%
Weighted Average	93.8%	2.23	2.38	84.4%	94.6%	2.28	2.45	-0.9%	-2.1%	-3.0%

Based on simulation described in accompanying text with F(1)=.01; F(2)=.03; F(3)=.03;F(4)=.06; $p_d=.7$; $p_r=.2$; $T=2$; $\alpha_d=.05$; & $\alpha_s=.15$.

From Table 2, we that see that a world with a relatively small underreporting problem is less likely to produce net escrow benefits. When most victims bring complaints, the escrow option is more likely to convert direct complaint victims to escrows (thereby retarding deterrence) than to convert silent victims to escrows (thereby enhancing deterrence). Table 2 shows that it is also possible for the escrow option to reduce the probability that a harassing professor will be investigated and reduce the expected number of complaints per investigation. Table 3 goes a step further in exploring the conditions under which an escrow regime enhances deterrence by reporting the relative improvement in the investigation probability for 81 different simulations:

		Probability that Direct Complainant will Instead Escrow Allegation (α_d)								
		5%	10%	15%	20%	25%	30%	35%	40%	45%
Probability that Victim Would Bring a Direct Complaint in Escrowless World (p_d)	5%	37%	33%	30%	27%	24%	21%	17%	14%	11%
	10%	14%	11%	8%	5%	2%	-1%	-4%	-7%	-10%
	15%	7%	4%	1%	-1%	-4%	-7%	-10%	-13%	-16%
	20%	4%	1%	-2%	-4%	-7%	-10%	-12%	-15%	-18%
	25%	2%	-1%	-3%	-6%	-8%	-11%	-13%	-16%	-18%
	30%	1%	-2%	-4%	-6%	-8%	-11%	-13%	-15%	-18%
	35%	0%	-2%	-4%	-6%	-8%	-11%	-13%	-15%	-17%
	40%	0%	-2%	-4%	-6%	-8%	-10%	-12%	-14%	-16%
	45%	-1%	-2%	-4%	-6%	-8%	-10%	-11%	-13%	-15%

Based on same analysis as Tables 1 and 2. Holding constant the parameters: F(1)=.01; F(2)=.03; F(3)=.03;F(4)=.06; $p_f=.2$; $T=2$; and $\alpha_d=.05$, but varying p_d & α_s .

The simulations in Table 3 simultaneously vary the probability that victims would bring a direct complaint in an escrow world (p_d) and the probability that these direct complainants would instead escrow their complaint if given the escrow option (α_d) (holding constant all of the other parameter assumptions of Table 1). Table 3 corroborates our previous discussion, in that to enhance deterrence, the escrow option is best deployed in contexts where underreporting is more severe or in which direct claims are unlikely to be converted to escrowed claims.

These simulations at best scratch the surface of the possible permutation of parameter values that might be evaluated. More generally, we find that escrows are more likely to enhance deterrence as:

- (i) the probability of one-off harassers ($F(0)$) declines;
- (ii) the probability of direct complaining (p_d) declines;
- (iii) the escrow release trigger (T) declines;
- (iv) the direct to escrow conversion probability (α_d) declines; or,
- (v) the silence-to-escrow conversion probability (α_s) increases.

In contrast, the relative level of deterrence from regimes with and without the escrow option is largely independent of the probability that silent victims will lodge follow-on complaints (p_f). To aid the reader in estimating alternative parameter values, we have provided on the Internet an Excel file that allows users to run their own simulations.⁴¹

2. Additional Costs and Benefits of an Allegation Escrow Regime

The foregoing simulations abstract away or simply ignore a variety of other impacts that escrows might have on the claiming, investigating, and ultimately sanctioning of sexual harassment. For example, the model implicitly assumes that victims experienced similar types of sexual harassment and had similar propensities of bringing a direct claim. But we know that sexual harassment comes in a variety of forms. It's possible that victims will be more likely to bring direct complaints when the harassment is blatant, and the harasser cannot preserve substantial plausible deniability. An unabashed sex-for-grades demand via text stands on a different footing than an inappropriate leer in a private office meeting. Hence, we expect that giving victims an escrow option would have a channeling impact on claim selection, which is related to our previous discussion of "wrongdoer uncertainty." This channeling effect might be a social good, by fostering an equilibrium in which egregious forms of harassment are more quickly brought to the authorities, while the less egregious would remain in escrow until they were buttressed with additional support. Indeed, under this reading, the fact that some escrowed claims remained orphaned might not be an unalloyed bad.

More prosaically, an escrow option might also increase the quantity and quality of claims simply by providing a single, straightforward venue to lodge complaints. Grievance procedures at some universities have been criticized for being confusing and opaque.⁴² A poorly implemented escrow system might add to the confusion and thereby deter victims from taking any action. But, as we will argue below, a well-designed escrow mechanism might provide victims of harassment the ability to log on to a single portal and lodge either a direct or escrowed allegation. Creating a focal location on the Internet with transparent, easily-understood options might itself go a long way toward facilitating complaints from victims of sexual harassment.⁴³ When it comes to "naming, blaming and claiming," framing matters.⁴⁴

Giving victims the escrow option is also likely to enhance the quality of evidence that is made available for investigation. In equilibrium, some victims who would have filed follow-

⁴¹ Ian Ayres & Cait Unkovic, (2011), <http://www.ianayres.com/escrowsimulation.xls>.

⁴² See *supra* notes 36 and 36, and accompanying text.

⁴³ Indeed, we can imagine making participation in the escrow system a first-stage requirement for even those victims who choose to lodge direct complaints. Such primacy might help to publicize the system, and generate trust and interest for those victims who are reluctant to report harassment directly.

⁴⁴ William L.F. Felstiner, Richard L. Abel & Austin Sarat, *supra* note 7,; see also Judith Berman Brandenburg, *Sexual Harassment in the University: Guidelines for Establishing a Grievance Procedure*, 8 SIGNS 320 (1982) (providing a guideline for establishing a grievance procedure, as well an evaluation of the Yale College Grievance Procedure).

on complaints (after learning of another complaint against the same harasser) will instead be moved to escrow their allegation in advance. Escrowed allegations can provide superior evidence of harassment to investigators for two independent reasons. First, the escrowed complaint reduces the risk of copy-cat allegation. Once an allegation of harassment is made public, it is possible for subsequent claimants to falsely mimic, either intentionally and unintentionally, the details of a harassment claim. Escrowed claims reduce this risk of piling on.⁴⁵ Second, giving victims an escrow option gives them the opportunity to create a contemporaneous record of their abuse. Follow-on complaints are more likely to present the investigator with stale evidence. Follow-on complaints present the investigator with testimony of events that at times took place years in the past. An escrowed allegation might similarly take years to come to light, but may be based on an account that is recorded much closer to the harassing events.

Even without escrows, many victims preserve contemporaneous evidence of their harassment through analogous, though more informal, mechanisms. Some victims tell a friend or relative what happened soon after the event. Telling a friend is itself a kind of allegation escrow. It is routine for investigators to rely on this kind of corroborating evidence to mitigate both the stale evidence risk and the copy-cat risk. But even here allegation escrows offer important evidentiary advantages. An investigator or adjudicator may worry testimony of a friend or relative, who would also be called upon to remember a conversation from the past, is inaccurate or biased. In contrast, the evidence placed in escrow – which we will detail below⁴⁶ – might include affidavits, photographs and even video testimony, which do not alter or degrade with time. An escrowed allegation is more likely to contain the exact dates of harassment than a victim or friend trying to recall what happened months or even years before.

In addition, the escrowed allegations are likely to be more detailed than those made to a friend. An entry in a personal diary or an email to a friend can, like a formal escrow, eliminate the faulty memory concern, but these unaided, privately-created records are more likely to leave important evidentiary elements unaddressed. Lawyers, police, and rape-trauma counselors conducting intake interviews with victims pro-actively solicit information regarding evidentiary details of the wrongdoing.⁴⁷ As we will discuss below, an escrow mechanism can be structured to guide victim depositors through a series of questions that is more likely to address all the elements of a sexual harassment claim. Indeed, an escrow mechanism might even give victims the option of depositing a sworn video deposition taken by an interrogator trained in the field. For all these reasons, an escrow regime might not only produce an equilibrium with more complaints per investigation, but also a better evidentiary foundation by providing better plaintiff evidence per complaint.

But while allegation escrows are likely to mitigate the problem of stale plaintiff evidence, they do not solve the problem of stale defendant evidence. Escrows can create asymmetric staleness. A professor who is falsely accused of harassing a student years in the past will have a harder time presenting evidence of a valid alibi than a professor who received more contemporaneous notice of the allegation. From the perspective of procedural fairness, allegation escrows can thus create an uneven playing field. An accused must rely on

⁴⁵ Of course, the risk of collusion may be higher in escrowed complaints than in direct, public complaints. This risk of collusion might be treated with other types of evidence – for example, evidence that the two escrow complainants attended school at different times and live in different cities would make it less likely that they colluded in escrowing allegations against the same professor. In contrast, the risk of copy-cat allegations can occur without collusion, and collusion can occur in the absence of allegation escrow systems.

⁴⁶ See *infra* at 50.

⁴⁷ Analogously, physicians do not simply rely on the set of facts that patients choose to offer, but routinely ask follow up questions. LISA SANDERS, EVERY PATIENT TELLS A STORY: MEDICAL MYSTERIES AND THE ART OF DIAGNOSIS 20 (2009).

his fading memories, while the accuser has the possibility of presenting a fixed record of her near-contemporaneous narrative. Moreover, the accused cannot confront the complainant's prior self. He can only ask the complainant's present self, who may no longer remember other issues relevant to the defense. These kinds of concerns underlay statutes of limitations and a host of evidence and criminal procedure protections.⁴⁸ These familiar concerns are heightened, however, in an escrow regime, because the asymmetries are also heightened. An accused harasser might need to suddenly respond to multiple, well-preserved near-contemporaneous allegations.

One way forward is to provide the accused with an analogous escrow option. What we will call a "defendant's escrow" or an "anti-allegation escrow" would give potential defendants the option of making information deposits that give near-contemporaneous accounts of their own narrative. Some might, at first, interpret a professor making a deposit would as itself evidence of a guilty mind. But there are circumstances in which a professor who is innocent of harassment might nonetheless be concerned that a student might make a claim based on a misconstrued remark or action, or because the student has become disgruntled. In the extreme Biblical example from Genesis, Joseph might have had an inkling that Potiphar's wife would make a false accusation of harassment after Joseph had spurned her advances.⁴⁹ Similarly, in *To Kill a Mockingbird*, Tom Robinson might have reasonably worried that Mayella Ewell would falsely accuse him after he spurned her advances.⁵⁰ Indeed, years ago one of us (Ayres) experienced just this kind of concern while teaching at Stanford, when a student acted inappropriately during a private office meeting. Ayres reacted by creating a kind of anti-allegation escrow – depositing a private memo with his account of what transpired with another faculty member with the understanding that the memo would only be made public if the student lodged a complaint.⁵¹

This narrative of the wrathful spurned-woman can of course be misused by harassers to try to create false-evidentiary records of the "she came on to me" defense. But such evidentiary manipulation is less likely to be effective as a response to multiple escrowed

⁴⁸ See, e.g., David S. Davenport, *The Confrontation Clause and the Co-Conspirator Exception in Criminal Prosecutions: A Functional Analysis*, 85 HARV. L. REV. 1378 (1972); Michael H. Graham, *The Confrontation Clause, the Hearsay Rule, and Child Sexual Abuse Prosecutions: The State of the Relationship*, 72 MINN. L. REV. 523 (1988); Michael H. Graham, *The Confrontation Clause, the Hearsay Rule, and the Forgetful Witness*, 56 TEX. L. REV. 151 (1978).

⁴⁹ In the biblical account, the unnamed wife of the rich Potiphar attempted to seduce Joseph when he was a slave in Egypt (Genesis 39:7-12), and, after she was rebuffed, falsely accused Joseph of attempting to rape her ("He came in here to sleep with me, but I screamed.") (Genesis 39:13-20).

⁵⁰ HARPER LEE, *TO KILL A MOCKINGBIRD* (1960). Steve Lubet has a deeply insightful disquisition on the novel questioning the ethics of Atticus Finches' cross examination of Mayella. Steven Lubet, *Reconstructing Atticus Finch*, 97 MICH. L. REV. 1339, 1348 (1999) ("I am not arguing that Tom Robinson was a rapist. My point, however, is that Mayella's story is also coherent and supported by the facts adduced at trial. Atticus Finch undermined her credibility, but he did not, Scout's prejudices aside, prove Mayella to be a liar.").

⁵¹ Beyond our motivating example of sexual harassment, the potential use of defense escrows might also be deployed by someone who refuses to participate in an illegal conspiracy. For example, in 1982, Robert Crandall, the corporate miscreant and C.E.O of American Airlines, got on the telephone and "invited Howard Putnam, the C.E.O. of Braniff Airways, to agree to raise prices." Richard Schmalensee, *Bill Baxter in the Antitrust Arena: An Economist's Appreciation*, 51 STAN. L. REV. 1317, 1327 (1999). Putnam not only refused but heroically "turned over a recording of the call to the Department of Justice." *Id*; see also *United States v. American Airlines, Inc.* 743 F.2d 1114 (5th Cir. 1984), *cert. dismissed*, 474 U.S. 1001 (1985); 1985-2 Trade Cas. (CCH) 66,866 (N.D. Tex. 1985) (concerning settlement and consent decree). A less heroic Putnam might have instead chosen to place the information into a defendant's escrow. Notwithstanding anti-retaliation protections, potential whistleblowers know that they risk being falsely accused. Anti-allegation escrows might provide a mechanism to offer them a modicum of protection against retaliatory accusation and in so doing encourage whistleblowing. But as suggested by our early discussion, *supra* Subsection I.B.1, the net impact of the escrow option might be to decrease the amount of publicly actionable information – especially if too many future Putnam's choose the escrow instead of directly reporting their information.

harassment allegations – for the simple reason that it becomes less plausible that there would be multiple spurned women who independently chose to punish their unrequited advances by making false accusations. Giving potential defendants an escrow option can help level the evidentiary playing field for at least some accused. But for others, the problem of asymmetric access to contemporaneous narrative will remain an issue with which adjudicators must grapple⁵².

The Potiphar example also raises a legitimate concern that the escrow option might increase the number of false complaints. It's hard to construct a story where the escrow option would increase the number of false direct complaints.⁵³ But one might imagine a world where disgruntled students felt that it safer in depositing a false complaint of harassment in escrow. The “safety in numbers” argument discussed above might apply as well to false claims by disgruntled students. For example, a student who is angered by a bad grade might be more willing to deposit a false claim, knowing that it will only come to light if it is corroborated by other (possibly false) claims. Or one might fear that bad faith depositors might upload fabricated complaints in an effort to discover which students are submitting deposits, and which professors are targeted by those complainants.⁵⁴ In each case, it will be harder for an accused to respond to a multi-front war, even if the dispute was not provoked by the defendant's own actions. Collusion among bad faith complainants might also be more difficult to detect in a world with escrows than in a world in which direct complaints are the only option. Even the increase in escrowed reports of less egregious or less clearly violative conduct, which was discussed above as a benefit of the system, could become harmful if these negligible or unworthy claims are converted from silence to escrow.

If the number of inappropriate escrowed or follow-on complaints increases, the escrow option could on net increase the Type II errors – that is, the number of factually innocent defendants who are mistakenly sanctioned. Although false claims would not automatically lead to sanctioning, a world with more false claims is likely, because of errors in adjudication, to lead to an increase in mistaken sanctions. The possibility of increased Type II errors is especially worrisome because this possibility turns on information that is difficult to know in advance or even after the fact of adopting the escrow option. As with interventions that seek to encourage date-rape prosecutions,⁵⁵ the net impact of escrows on Type I and Type II errors may turn on our perceptions about the preexisting propensity of students and employees to bring truthful versus false complaints. If one believes that the primary existing problem of sexual harassment is Type I error – the non-sanctioning of harassers – prompted in large part by the under-reporting of valid complaints, the escrow option may be justified as a means of inducing more reporting.

On the other hand, some might argue that the escrow option will exacerbate the problem of type I errors, even more than suggested by Table 2 above. We showed that orphaned-escrows could reduce the net quantity of true harassers who are investigated.⁵⁶ One-off harassers are effectively immunized if the object of their harassment is only willing to file an escrowed claim. But the problem of Type I errors could also be exacerbated if, in a

⁵² The most concerning context is one in which the accuser lodges a complaint based on entirely fictional events. In such cases the professor would have no reason to fear charges or make a defense escrow submission.

⁵³ Although if an escrowed world radically increased the salience and publicity of harassment allegations, one might imagine that even false claimants would come to see direct, initial complaints as more “available.” See, e.g., Russell Korobkin & Chris Guthrie, *Heuristics and Biases at the Bargaining Table*, 87 MARQ. L. REV. 800 (2004) (discussing the availability heuristic).

⁵⁴ As we'll discuss in more detail below, allegation escrow systems can and should employ techniques to prevent such fishing expeditions, in large part because they can result in premature identification of the complainant and accused. No system is entirely impervious to bad faith actors, however.

⁵⁵ Ayres & Baker, *supra* note 8, at 637-40.

⁵⁶ See *supra* Subsection I.B.1.

world with escrows, investigating and adjudicating bodies treated direct complaints by individual claimants less seriously. A concern with creating a new mechanism for victim corroboration is that authorities might give less weight to uncorroborated claims. In a world with more “he said/they said” disputes, there may be insufficient attention paid to “he said/she said” adjudication. In the extreme, this concern might lead de facto to a two-bite rule – where professors were effectively immune from sanction unless accused by more than one woman. In part this concern is likely to be mitigated by other sources of corroboration (e.g., witnesses or emails from the accused) that will at times be available to individual claimants. Moreover, the potential for increases in this type of error is likely limited by the difficulties that go-it-alone claimants already face. In a world where unsupported claims are already treated with suspicion, it is less likely that the sudden existence of corroborated escrowed claims would noticeably decrease perceived complaint credibility. Still, authorities reacting to a world with escrowed complaints should be on guard against diminishing the worth of unescrowed claims⁵⁷.

Stepping back, we can see that the escrow options can produce a mixture of salutary and deleterious social impacts. While it will be impossible to precisely know when the positives will outweigh the negatives, this section has shown that allegation escrows are more likely to have a net positive influence when (a) many instances of wrongdoing go unreported; (b) many wrongdoers are recidivists; (c) the proportion of false claims in the victim class is relatively small; and (d) potential defendants are given the offsetting option of depositing anti-allegation narratives into escrow. We will return to these factors in Part III when we assess the case for allegation escrows in a variety of other contexts.

C. Legal Issues

1. Allegation Escrows in Post-Secondary Schools and Title IX

Any mechanism for reporting sexual harassment in colleges and universities receiving federal funds operates against the background of Title IX of the Education Amendments of 1972 (Title IX), which prohibits gender-based discrimination in federally supported educational programs.⁵⁸ In *Franklin v. Gwinnett County Public Schools*,⁵⁹ the Supreme Court interpreted gender discrimination under Title IX to include sexual harassment.

While *Franklin* held that schools may be held liable when officials intentionally fail to end harassment,^{60&61} the Department of Education has developed a complex regulatory

⁵⁷ Indeed, many institutions resist the idea of any seemingly anonymous complaint mechanisms. At Yale, for example, a 2010 report issued by the specially convened Sexual Misconduct Committee said, “We do not recommend the creation of a specific website, hotline, or other venues through which anonymous reports are encouraged. Instead, we want to encourage confidential reporting; and, indeed, we worry that the explicit provision for anonymous reporting might discourage non-anonymous reporting. Non-anonymous (but still confidential) reporting is more useful both to the complainant and to the University.” JASMINA BESIREVIC-REGAN, *supra* note 35, at 3.

⁵⁸ 20 U.S.C. §§ 1681-1688.

⁵⁹ 503 U.S. 60 (1992). *Franklin* addresses the claim of a female student that she had been repeatedly harassed by a male teacher, and that the school administration had both failed to remedy the situation and pressured her to forego litigation. *Franklin* builds on an earlier case, *Cannon v. University of Chicago*, 441 U.S. 677 (1979), in which the Court held that Title IX creates an implied cause of action for victims of sex discrimination, and that students need not exhaust administrative remedies before pursuing private litigation. In *Cannon* the Court addressed Geraldine Cannon’s allegation that she had been denied admission to medical school on the basis of her gender. *Id.* at 690.

⁶⁰ The intentional failure to act standard imposed in private suits is higher than in administrative enforcement cases. In actions seeking administrative enforcement, injunctive relief can be granted on the basis that school officials knew or reasonably should have known that sexual harassment was occurring. See Dear Colleague Letter from U.S. Dep’t of Educ. Office of Civil Rights (Apr. 4, 2011), *available at*

scheme to ensure compliance with Title IX.⁶² Specifically, school officials must (1) investigate and address harassment when it reasonably should know about the conduct, even pre-notice, and (2) undertake investigations even where victim confidentiality cannot be assured.⁶³ These requirements may make schools reluctant to implement escrowed reporting systems, but may also increase the potential benefits of such systems to victims. Risk-averse schools may fear that federal investigators would view any conduct related to an escrowed complaint as within those “reasonable” bounds, leading schools to incentivize public reporting as much as possible and to resist any “official” mechanism that fails to inform the school of alleged harassment. On the other hand, the requirement to investigate all such complaints without guaranteeing confidentiality may heighten the concerns that keep victims silent in the first place.⁶⁴

Nonetheless, an allegation escrow system might help schools fulfill their Title IX obligations. The Department of Education has suggested that one “reasonable” method of identifying harassment pre-notice is seeking out cases that resemble previously submitted complaints.⁶⁵ Schools could utilize escrow systems to fulfill that obligation by submitting any claim received, and in the case of a triggered complaint, contacting the users whose escrowed allegations match.⁶⁶ Administrators might further pursue their Title IX obligations by responding to aggregate data suggesting that a particular department, fraternity, or physical location on campus repeatedly engages in misconduct. Finally, schools might better fulfill their Title IX obligations by encouraging more and earlier allegations through the escrow system.⁶⁷

<http://www2.ed.gov/about/offices/list/ocr/letters/colleague-201104.pdf>. The letter is identified as: "a “significant guidance document” under the Office of Management and Budget’s Final Bulletin for Agency Good Guidance Practices, 72 Fed. Reg. 3432." *Id.* at 1. See also U.S. DEP’T OF EDUC., OFFICE FOR CIVIL RIGHTS, REVISED SEXUAL HARASSMENT GUIDANCE: HARASSMENT OF STUDENTS BY SCHOOL EMPLOYEES, OTHER STUDENTS, OR THIRD PARTIES tit. IX, at 12-13 (2001), available at <http://www2.ed.gov/about/offices/list/ocr/docs/shguide.pdf>

⁶¹ The requirement that a school or its responsible administrators demonstrate some intentional failure to remedy issues of harassment distinguishes private suits alleging Title IX violations from private suits in the employment context (under Title VII of the Civil Rights Act of 1964, 42 U.S.C. §§ 2000(e) et. seq.). As we discuss below, the regulatory implementation and judicial interpretation of Title VII establish a slightly lower standard of liability for employers facing private litigation for monetary damages.

⁶² See U.S. DEP’T OF EDUC., *supra* note 60.

⁶³ 20 U.S.C. § 1684.

⁶⁴ See Nicole Allan, *Confusion and Silence*, YALE ALUMNI MAG., July – Aug. 2011, at 38; available at http://www.yalealumnimagazine.com/issues/2011_07/feature_titleix.html; CATHERINE HILL & ELENA SILVA, DRAWING THE LINE: SEXUAL HARASSMENT ON CAMPUS 4 (2005), available at <http://www.aauw.org/learn/research/upload/DTLFinal.pdf> (noting that fear of public identification is a reason for underreporting). The 2001 DOE guidance and other official documents direct schools to consult complainants’ wishes with respect to confidentiality and to honor them where possible. However, the documents acknowledge that schools may not be able to maintain complainant confidentiality. Furthermore, the DOE acknowledges that the accused’s due process rights may force a school to choose between breaching the victim’s confidentiality and being unable to pursue the investigation at all, which itself may carry administrative penalties.

⁶⁵ See U.S. DEP’T OF EDUC., *supra* note 60, at 7.

⁶⁶ This use of the escrow system would not subvert the value of the escrow system to the escrow users, since they would already expect that upon a triggering match their complaints would be forwarded to school officials. Such users are therefore able to put forward their complaint with the safety-in-numbers function fulfilled by the person who submitted a public complaint to the school. In the alternative schools could also require that any direct complaints also be submitted to or via the escrow mechanism.

⁶⁷ In addition to Title IX requirements, schools enrolling students who are granted federal financial aid must also comply with the Clery Act (formally, The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act). The federal law and implementing regulations impose fairly strict reporting and early warning requirements regarding crimes, and both forcible and non-forcible sexual offenses, occurring on or near campus, or involving enrolled students. 20 U.S.C. § 1092(f) et. seq. and 34 C.F.R. 668.46 Escrow developers and sponsoring institutions should take care to ensure that the addition of an escrowed reporting option does not

2. Allegation Escrows in the Workplace and Title VII

Closely related to harassment in colleges and universities is sexual harassment in the workplace, which is governed primarily by Title VII of the Civil Rights Act.⁶⁸ While Titles VII and IX share a common goal of preventing discrimination, differences in standards of liability and affirmative defenses may make employers even more reluctant to implement information-escrow systems than schools. Under Title VII, employers are required to take a much more active role than are schools in the prevention and investigation of sexual harassment in the workplace.⁶⁹ Indeed the leading cases in Title VII suits for sexual harassment, *Faragher v. City of Boca Raton*⁷⁰ and *Burlington Industries, Inc. v. Ellerth*⁷¹ indicate that a primary aim of Title VII is encouraging employers to prevent and quickly address sexual harassment. Much of Title VII jurisprudence focuses on whether employers have taken reasonable steps to prevent and promptly correct harassment in their workplaces, often interpreted as providing harassment awareness training and reasonably accessible mechanisms for lodging harassment complaints.⁷²

As governed by the *Faragher / Ellerth* framework, employers are most vulnerable to litigation when a supervisor, acting in his supervisory capacity, sexually harasses a subordinate. If the supervisor's actions constitute a tangible employment decision,⁷³ the employer is held strictly liable. Most concerning to employers in this context, such strict liability applies regardless of whether the subordinate employee had previously complained of the behavior, or whether the employer was aware of the harassment in any way. When a supervisor's harassment creates a hostile work environment but does not rise to the level of tangible employment action, the employer again faces strict liability, but in this case can argue the affirmative defense that the subordinate complainant unreasonably failed to take advantage of remedies available in the workplace. An employer who successfully establishes this affirmative defense can be subject to injunctions, but not to monetary or punitive damages. Finally, in the case of peer or co-worker harassment, the employer is not strictly liable but can be subject to damages if the complainant shows that the employer failed to respond appropriately to her complaints of harassment. The employer may again argue the affirmative defense that the employee failed to take advantage of the remedies made available to her at work, and if successful often in that argument will often avoid all or nearly all liability. Such a focus on the employer's actions and the get-out-of-jail free card that reasonable employer-provided complaint mechanisms represent understandably make

put the school in danger of violating Clery Act requirements. The specific adaptations this will require will be context and school specific, but one common denominator should be to distance the relationship between the sponsoring school and the escrow system to the extent possible. In order to comply with reporting and warning rules, escrow systems should be developed in such a way that the school is considered legally aware of the reported incidents only upon forwarding of successfully matched submissions.

⁶⁸ Enacted in 1964, codified at 42 U.S.C. § 2000(e) et. seq.

⁶⁹ That is not to say that employers operate under significant liability burdens, however. As we discuss here, the existing Title VII framework, while less friendly to employers than is Title IX to schools, is still nevertheless very employer friendly.

⁷⁰ *Faragher v. City of Boca Raton*, 524 U.S. 775, 806 (1998) (noting "Title VII's . . . basic policies of encouraging forethought by employers and saving action by objecting employees").

⁷¹ *Burlington Industries, Inc. v. Ellerth*, 524 U.S. 742, 764 (1998) ("[T]itle VII is designed to encourage the creation of antiharassment policies and effective grievance mechanisms.").

⁷² Indeed Lauren Edelman and colleagues argue that employers played an active role in shaping this area in Title VII law, and that the focus on employee sensitivity training and other internal mechanisms became entrenched in law after first beginning in industry. For one of her first pieces on this issue, see Lauren B. Edelman, Christopher Uggen & Howard S. Erlanger, *The Endogeneity of Legal Regulation: Grievance Procedures as Rational Myth*, 105 AM. J. SOC. 406 (1999).

⁷³ Tangible employment decisions can include a demotion, pay cut, or transfer between divisions.

employers eager to uncover any cases of harassment that could lead to litigation as quickly as possible.⁷⁴

*Pennsylvania State Police v. Suders*⁷⁵ gives large-scale employers even more reason to focus on demonstrable steps to prevent and correct harassment as a means of avoiding liability, and thus to fear unreported cases of harassment. Seemingly forging a middle-path between the absolute liability of tangible employment action cases and the fairly easily avoided liability of hostile environment cases, the Court held in *Suders* that Title VII allows constructive discharge claims, and that such claims can in the most severe cases rise to the level of tangible employment actions.⁷⁶ The Court also held, however, that in all but the most egregious constructive discharge cases, employers will have recourse to the affirmative defense that the employee unreasonably failed to take advantage of employer steps to prevent and correct harassment.⁷⁷ This approach to constructive discharge claims broadens employee access to courts in Title VII suits, as it removes the affirmative defense as a basis for summary judgment where there is a reasonable question as to whether the employee quit in response to harassment that constituted both a hostile work environment and a tangible employment action.⁷⁸ At the same time, however, by limiting the strictest standards of liability to only the most grave constructive discharge cases, the Court also increased the importance and prevalence of the reasonable employer actions affirmative defense in Title VII cases. *Suders* thus serves to increase an employer's interest in having publicly demonstrated mechanisms for reporting harassment, but may also increase employer resistance to escrow-based reporting systems which do not automatically notify the employer of complaints.

As with schools, employers should be able to develop allegation escrow systems that help, rather than hinder, their effort to comply with the requirements of Title VII. Given the increasingly narrow focus on an employer's reasonable efforts to prevent and correct harassment, however, employers may nevertheless resist implementing escrow systems for fear that they will lead to a perception of employer indifference. Or, more cynically, employers may wish to avoid implementing mechanisms that allow for a middle ground between direct reporting and no reporting at all. Employers may fear that allegation escrow systems will expose them to increased liability by limiting their ability to either combat the harassment directly or employ the affirmative defense. Such concerns are not well founded, however, as the current employer-friendly climate in Title VII cases would likely lead courts to view allegation escrow systems as evidence in favor of the affirmative defense, rather than as evidence of the employer having failed to act despite notice. Whether or not their reluctance to implement escrowed reporting mechanisms is reasonable, however, employers may ultimately find the current Title VII framework too comfortable to risk changing.

⁷⁴ What's more, employers also operate under some pressure to identify cases of harassment as soon as possible, as the amount of monetary and punitive damages are dependent in part on the duration of harassment about which the employer should have been aware. *See, e.g., Blackmon v. Pinkerton Sec. & Investigative Serv.*, 182 F.3d 629, 636 (1999) ("duration of harassment" is a "relevant factor[]" when determining the appropriateness of punitive damages").

⁷⁵ 542 U.S. 129 (2004).

⁷⁶ *Id.* at 148.

⁷⁷ *Id.* at 153 ("To be sure, a constructive discharge is functionally the same as an actual termination in damages-enhancing respects.").

⁷⁸ The court also makes clear in *Suders* that even when the affirmative defense is available to the employer, the burden of showing that the employee unreasonably failed to take advantage of existing employer-provided systems falls on the employer. *Id.* at 146 ("[*Ellerth* and *Faragher*] place the burden squarely on the defendant to prove that the plaintiff unreasonably failed to avoid or reduce harm."). This burden allocation further limits the utility of the affirmative defense in summary judgment and other pre-trial motions.

3. The Escrow System's Relationship with Sponsoring Institutions

Though specific requirements vary by jurisdiction and job sector, nearly all employees enjoy a legal or contractual right to review documents used by an employer to make hiring or employment decisions.⁷⁹ As a result, any escrow system would need to be clearly and legally distinct from the companies that it serves. Before any escrowed allegations are accepted, the escrow service should establish that it is entirely separate from any client companies, and that the employer has no claim to any of the complaints lodged with the service. Employers will only be granted access to complaints when the escrow service chooses, in its judgment, to forward a match generated by the system.

The escrow service should be as separate as possible from the employer to prevent being held liable for the employers' response, or lack thereof, to gender dynamics in the workplace. In addition, the escrow service would benefit from making explicit its right to use its judgment regarding matched complaints and whether they are suitable for forwarding to the employer or to the authorities. Because there will inevitably be error in a process that operates in a realm of unproven allegations and vague descriptions, the escrow service should avoid any implications that it has an obligation to forward complaints that happen to meet certain criteria. Similarly, employers should make clear that they are unaware of submitted allegations awaiting a match, and also legally barred from being aware of them.

A strong separation between the sponsoring institution and the escrow system is also important to protect the integrity of the allegation escrow system. Both schools and employers have an interest in identifying certain, potentially damaging, types of behavior as soon as feasible, and in the absence of proper separation, the institutions may put pressure on the allegation escrow agents to look for and share evidence of that behavior. Both schools and employers may seek information about illegal activity, for example. Schools might want to know about academically dishonest or risk-taking behavior, while employers would be eager to know about employees embezzling or mishandling company resources. Nonetheless, using submitted allegations to identify such information would be a significant subversion and abuse of the system, as well as of the trust users had placed in the allegation escrow mechanism. The best defense against such unacceptable institution encroachment is a firm and clearly delineated distinction between the third-party escrow provider and the sponsoring school or employer.

4. The Escrow System's Relationship with Users

In any allegation escrow mechanism, managing the relationship between the escrow system and the user is of critical importance.⁸⁰ In the vast majority of contexts, the wisest course of action would likely minimize the relationship with complainants to the extent feasible. This distance must of course be balance against the escrow system's duty owed to the user. No allegation escrow should take complete responsibility for the integrity of complaints it forwards to employers, schools, or administrative authorities, as that would be impractical and lead to inappropriately orphaned complaints.⁸¹ Indeed, an escrow system

⁷⁹ See, e.g., WISC. STAT. ANN. § 103.13(2) (West 2011) (granting employees broad right to access personnel records subject to narrow exceptions).

⁸⁰ In reality any escrow system should take care to manage its relationship with users in any context, including shared-interest and other, less easily categorized, escrows. Because the relevant legal concerns are heightened in the allegation context, however, we focus on that example here.

⁸¹ Of course, allegation escrow agents also have a moral and legal obligation to prevent the escrow mechanism they oversee from becoming a blatant tool of would-be defamers, and from becoming a means of employment harassment itself. As we discuss below, this obligation to both complainants and the accused presents several design issues.

should establish the perception that it is simply a channel through which allegations may pass. To this end, such systems ought to require complainants to acknowledge that the only way to ensure that someone will read the complaint is to pursue a standalone complaint. Other than the triggering threshold, the user interface should not explain or even mention the matching algorithm. Similarly, the website should keep confidential the process for confirming that matched complaints are distinct and made in good faith. Finally, despite the rough ‘reality checks’ run on submissions, the escrow system should explicitly and clearly disclaim any responsibility for the content of the submissions. Setting low expectations with respect to the system’s obligations will serve to minimize the complexity and potential liability of the escrow system as a whole, which best serves the interests of the system, the institution⁸², the users, and the accused.

In Part III, we will address in more detail legal and programming issues involved in our attempt to bring a harassment allegation escrow into being as a non-profit Internet website. But here we focus on two game-theoretic design choices – concerning the escrow trigger and interim reporting – that might powerfully impact the escrow equilibrium. The triggering mechanisms determine the conditions under which the escrow deposits will be released, to whom and potentially for what purposes. Since the escrow mechanism is in essence a contract specifying the contractual duties of the escrow agent (who might or might not be a fiduciary of the depositor), escrow depositors might specify the contract in a variety of different ways – giving the depositors *ex ante* and even various aspects of *ex post* freedom. One approach to choose among these particular options would be to speculate about the types of contractual terms that are most likely to be favored by the victim class.⁸³

For example, the mechanism might specify that upon receiving the pre-specified number of matching deposits, the escrow agent would merely reveal the identity of the claimants to one another (or reveal their identity and their underlying claims) and let the claimants decide post-match whether and how to proceed. Granting claimants this kind of *ex post* power might induce more deposits. On the other hand, it might also induce more fallacious deposits from individuals who merely make a deposit to learn the identity of other claimants. Because we want depositors to take the process seriously, and because we want to protect good faith depositors from subversion of the system, we prefer a design where matched deposits are automatically forwarded to the proper authorities as actionable complaints.⁸⁴ Potential depositors lose their own freedom not to proceed, but they gain the assurance that the claims of other depositors will be available for investigation. The relative inflexibility of automatic forwarding combined with formal or social consequences visited

⁸² One way in which schools and employers benefit from the minimization of the relationship between the escrow system and the complainant is through the complainant’s opportunity to interact with a relatively neutral third party. As Jennie Kihnley points out in her 2000 article, schools in particular often express two semi-contradictory aims of their sexual harassment reporting processes: (1) to empower victims and reduce sexual harassment, and (2) to limit their own liability in any relevant litigation. The potential tension between these two goals can lead to a confusing maze of process, rules, and personnel facing complainants. A relatively distant relationship between the complainant and the third-party escrow agent should help to clarify at least one part of the harassment grievance process. Jennie Kihnley, *Unraveling the Ivory Fabric: Institutional Obstacles to the Handling of Sexual Harassment Complaints*, 25 LAW & SOC. INQUIRY 69 (2000).

⁸³ This might include a number of difficult assessments – including not only ease-of-use, but also which terms are likely to produce an equilibrium with the most effective deterrence or some favored trade-off of type I and type II errors. One option for first generation escrow systems might be to alter and randomize the communication with and expectations of system users, in an effort to determine which approaches are best suited to particular contexts.

⁸⁴ However, as discussed below, *infra* at 53-54, choices are still needed at times as to whether to file the complaint through an employer’s ADR grievance procedure, a more formal sanctioning mechanism, or possibly to the police.

upon fallacious complaints may also reduce the number of false deposits and resulting type II errors.

The mechanisms must also specify the number of deposits lodged against a particular harasser that will trigger disclosure. We have thus far focused on an implementation where the escrow agent offers an across-the-board trigger of 2 (or possibly 3) deposits. But it would be possible to allow individual depositors to choose the trigger with which they are most comfortable. Under such a system, escrowed deposits would only be released if the set of deposits existed for which the trigger conditions were met for all the depositors in the set. For example, imagine a succession of deposits against a particular professor, where the claimants choose triggers of 4, 99, 2, 3, and 4. The third deposit would not trigger release, even though that depositor is comfortable with just two matching deposits, because there is not another depositor with a trigger of 2. The fourth escrow also would not trigger release because there are not three depositors with triggers of 3 or fewer (or subsets of 2 depositors with triggers of 2).⁸⁵ Like ex post control, we can imagine that an ex ante choice of trigger might increase deposits, and in particular might attract deposits from those complainants who are most reluctant to go it alone and feel secure only with many co-complainants. But it would be difficult to communicate the workings of this escrow adequately to depositors – who might not realize that their escrow would be orphaned even though their personally chosen trigger requirement had been met. Moreover, our simulation leads us to think that victim-chosen triggers are likely to lead in equilibrium to fewer harassment investigations on net (even if there are more escrow deposits).⁸⁶

The escrow contract must also specify whether a depositor can rescind or potentially accelerate the release of an, as yet, unmatched claim deposit. Rescission and acceleration can be thought of as midstream altering of the trigger number. Rescission effectively increases the trigger number to some unreachably high number to assure that the deposit would never be released. Acceleration has the effect of decreasing the trigger number – potentially to 1, meaning that the claimant would be willing to “go it alone” and have her claim deposit forwarded immediately unaccompanied by even a second claim. This is yet another dimension where theory and current data do not provide a clear, a priori solution. But we tentatively prefer an asymmetric system, in which a depositor can anytime after making a deposit accelerate her trigger to make a direct “go it alone” claim, but in which a depositor cannot decelerate (or rescind) her deposit. We favor the acceleration option, because of the positive externalities of released claims. If a victim after making a deposit is willing to “go it alone,” it furthers her private interest and the public interest in adjudicating and deterrence to immediately lodge the complaint on her behalf.⁸⁷ Indeed, another advantage of the escrow system is that it can provide complainants with a simple method of creating a contemporaneous account of their allegation with the continuing possibility of turning the deposit into a “go it alone” complaint at any point in the future. Just the process of privately giving voice to their narrative as part of making a deposit might be sufficient for some victims to be willing to move forward by themselves. The process of naming and blaming can itself be transformative and lead to claiming.⁸⁸ The acceleration option might also be used by depositors who over time find themselves in a less disempowered position. The

⁸⁵ It is possible that the first depositor (with a trigger of 4) would be happy to have her complaint released so long as four deposits had been placed in deposit, even though only three are releasable at the time of the match.

⁸⁶ See *supra* Subsection I.B.1 (discussing simulation with escrow trigger of 3 instead of 2). In addition, as with ir retrievable complaints, the relative formality of a system-determined trigger might reduce the number of bad faith “fishing” and frivolous complaints deposited.

⁸⁷ Owen Fiss famously wrote about the social values of public adjudication in Owen Fiss, *Against Settlement*, 93 YALE L.J. 1073 (1984).

⁸⁸ Felstiner et al., *supra* note 7, at 635-37.

same person who felt uncomfortable lodging a direct complaint during her second year of law school, may three years later find herself settled into a professional life that provides a more level playing field from which to initiate a go it alone grievance. Indeed, because sexual harassment claims are subject to statutes of limitations, a depositor might eventually face a choice between submitting a direct complaint and forgoing the possibility of future litigation. By notifying depositors that the statute of limitations is about to run against the accused with regard to their claim, escrow agents might prompt depositors to transform an escrowed allegation into a go-it-alone complaint. Because we assume that most allegation escrow users would remain silent in the absence of an escrow system, that transformation also encourages the submission of official complaints regarding incidents that would otherwise likely have gone unreported. Creating the acceleration option can thus mitigate the problem of orphaned deposits which stands as a chief contraindication of implementing an escrow regime.

The problem of orphan escrows is also a chief reason why we (slightly) prefer an asymmetric system where depositors cannot change their minds and rescind or cancel their deposit – effectively assuring that the claim will remain orphaned. Society is deprived of the deterrence value of rescinded complaints. Moreover, we worry that rescindable deposits might be taken less seriously by depositors who might (mistakenly) think they can always change their minds and cancel.⁸⁹ We also worry that some depositors might too readily rescind if they find that their deposit did not trigger an escrow release.⁹⁰ These depositors would only make a short-term deposit to find out (by the immediate release) if another deposit was already outstanding against a particular professor. On the other hand, the requirement that escrows be non-rescindable might dampen the initial deposit rate more than the rescission option depresses the amount of deposits for potential match. In the absence of persuasive evidence on this issue, we have a slight preference for the non-rescindable implementation that makes clear to victims at the time of deposit that they must be serious in making an escrow deposit because they will not be able to change their minds about the fact of the matter at a later time.⁹¹

Finally, the escrow contract should clearly delineate the uses, if any, that might be made of deposit information while the complaint remains unmatched. For example, it would be possible for the escrow agent to inform the accused that an escrowed allegation had been levied against him without revealing the name of the accuser making the deposit. The goal of such interim disclosure would be to potentially deter the accuser from harassing other students, because the accused would be on notice of a potential future investigation. An additional benefit would be that such a warning might induce an innocent defendant to submit a defense escrow report, should he be concerned that a particular disgruntled student might have submitted a false claim. However, the downside behind such interim disclosure to the accused is that it might trigger accuser retaliation against harassment victims.⁹²

⁸⁹ The thought is mistaken because a rescindable deposit that matches an existing deposit would constitute an immediate match and would give the depositor no opportunity to rescind (although an alternative escrow arrangement could include a cooling-off period for possible rescission before any deposit became eligible for matching).

⁹⁰ As we will discuss below with regard to shared-interest escrows, there may be a first-mover disadvantage to making deposits to an escrow. The rescission option makes it potentially too easy for depositors who come to learn that they were the first to make an allegation deposit against a particular person to withdraw their deposit.

⁹¹ However, it would be possible to construct a mechanism where deposits become void if unmatched after a certain number of years – possibly tied to the relevant statute of limitations.

⁹² If interim disclosures to the harasser were made, it would be useful to only disclose with some randomized lag time so that the accused might have a harder time identifying who was making the allegation. See *infra* Subsection I.C.2 (discussing randomized lag times with regard to shared-interest escrows). But even with randomized lag times, harassers might be able to infer that a complaint was made by the student that was most recently harassed.

Accordingly, we propose a regime where interim anonymous reports to the accused are not made, and indeed in which deposits are treated as if they are in a “black box” until matching. However, this treatment might merely be a default that individual depositors could contract around if they were comfortable in such notice being made, for example when a depositor limits her complaint to inappropriate professorial conduct in a large, lecture based class. In that case the complainant may be unwilling to make her allegations public in a go it alone fashion, but she may also feel confident that the accused will be unable to identify her after learning that a student in the lecture has submitted an escrowed complaint.

As we discuss in greater detail below, interim reports of varying granularity might also be revealed to the public or to the university to further other interests besides specific deterrence of the individual harasser. We favor disclosing to the public aggregate information on the number of allegation escrows that have been deposited with respect to substantial employers (combined with information on the number of deposits released from escrow). By letting victims know that other people have been making use of the escrow mechanism, disclosure can raise the salience of the mechanism, and perhaps lead to limited general deterrence by maintaining a visible enforcement presence on campus. It might even be possible to disclose the number of deposits for subgroups of workers (for example, for different schools within a university). The factor limiting the degree of granularity should be whether a harasser is likely to infer that a complaint has been deposited against him, and whether any member of the university is likely to infer who is submitting complaints. The total number of Yale University deposits increasing by one tells a particular professor very little. But the total number of Yale Law deposits increasing by one might tell a harassing law professor (shortly after an episode of harassment) that he has been accused.⁹³

In thinking about interim reporting, we should distinguish between individual malfeasance and institutional malfunction. Besides deterring individual acts of harassments, the escrows might be designed with an eye toward alerting human resource administrators about a more systemic problem. Instead of designing an escrow system to solely respond to the problem of repeated harassment by particular professors, it might also be possible to design a system to respond to more pervasively hostile educational or employment environments. For example, imagine that the escrow agent learns that seven harassment deposits have been received accusing different professors in the math department. Even if the individual deposits are not sufficient to sanction any of the individual professors, good-faith administrators might, if informed of the separate allegations, have sufficient evidence to take other kinds of action to mitigate a hostile atmosphere in the department.⁹⁴ Escrow designers should contemplate whether there could be different types of disclosure potentially with different release triggers and potentially for different types of proceedings or uses.⁹⁵ Thus, while the escrow agent might not publicly report department specific escrow amounts,

⁹³ For this reason we also support regular and scheduled periods of aggregate reporting, such as twice per semester, so harassers are less likely to know specifically when complained of conduct occurred. Similarly we also support centralized reporting of such aggregate data, so the accused cannot be identified on the basis of their supervisor’s reporting incidents of harassment.

⁹⁴ For example, administrators may employ sensitivity training to prevent sexual harassment. Kenneth M. York, Elizabeth A. Barclay, & Amy B. Zajack, *Preventing Sexual Harassment: The Effect of Multiple Training Methods*, 10 EMPLOYEE RESP. & RTS. J. 277 (1997)

⁹⁵ The IRS, for example, has successfully completed detailed audits of taxpayers with the understanding that the audits would only be used to assess the system levels of tax underpayment and not used to sanction those audited for any discovered underpayment of taxes. See Ian Ayres and Barry Nalebuff, *Winning the Audit Lottery*, FORBES MAGAZINE, November 30, 2009. While we would argue strenuously against removing accused sanctions as a way of extracting aggregate or non-traditional data from escrowed complaints, we can imagine that many schools could find analogous ways of utilizing the information in escrowed complaints even before they are matched. Assuming sufficient complainant protections can be assured, such early uses of the complaints should serve current and future harassment victims, as well as the sponsoring institutions, well.

it might be useful to reveal these counts to administrators for departments that display an inordinate number of deposits. It would be possible for the escrow agent to go beyond these more granular department-specific counts, and reveal to the administration the allegations themselves. Indeed, the escrow mechanism might even include a second trigger specifying release if a certain number of deposits were received relating to a department at a particular period of time. Thus, a victim depositing an allegation against a math professor might know that the allegation will be made public if either (i) another allegation deposit is received relating to the same professor; or (ii) three other allegation deposits are received relating to harassment in the math department during any three-year period. This second trigger would be better tailored to investigate and root out more pervasive atmospheres of harassment. And as before, depositors could rest assured that they are not alone in making their allegation in the sense that the second trigger would only be met if four relatively contemporaneous claims of department harassment were being made. We tentatively conclude against secondary triggers which complicate both agent's matching process and the explanation that must be made to potential depositors.

This brief discussion of triggers and interim reporting only scratches the service of the manifold possibilities of escrow design. While allegation escrows initially seem as though they might be designed by a simple act of deposit and a subsequent release if pre-specified conditions are met, we have shown that there are literally dozens of permutations on this basic design, as well as critical issues of judgment and context specific tailoring. Part III will return to these issues in even greater detail as well as a host of legal concerns as we approach the task of turning the idea into an operational website.

D. *Using Shared-Interest Escrows to Forestall Common Knowledge*

The final class of information escrows, what we call “shared-interest escrows” (or more simply “interest escrows”), includes implementations that have been most formally modeled in the academic literature and the most consciously put into practice. We begin by discussing “settlement escrows,” where the parties express their interest in settling a dispute or negotiation by depositing offers into escrow. In 1983, Kalyan Chatterjee and William Samuelson analyzed a negotiation mechanism in which a potential buyer and seller simultaneously sealed bids to a third-party, who announces a trade if (and only if) the bids overlap – meaning that the buyer's bid was higher than the seller's bid.⁹⁶ This game represents a kind of information escrow, where the offers are the information being deposited and the third-party is the escrow agent, who is instructed to only release the information on the pre-specified and non-discretionary conditions. As with allegation escrows, the private utterances placed into the settlement escrow are conditionally performative.⁹⁷ The complaint deposits that we discussed in the last section might spring into life and launch investigation proceedings. The bid deposits of settlement escrows are formal conditional offers to trade if there are overlapping bids at a price equal to the average of the overlapping bids.⁹⁸ For example, if the buyer deposits a \$100 offer, and the seller deposits an \$80 offer, the escrow agent would announce to them that a contract had been formed with a \$90 price. Shortly after Chatterjee and Samuelson published their article, Roger Myerson and Mark Satherthwaite published a path breaking paper, which still stands as one of the most

⁹⁶ Kalyan Chatterjee & William Samuelson, *Bargaining under Incomplete Information*, 31 OPERATIONS RES. 835 (1983).

⁹⁷ J.L. AUSTIN, HOW TO DO THINGS WITH WORDS (1962) (introducing the concept of “performative utterances”).

⁹⁸ Chatterjee and Samuelson had also analyzed that the price might be set so as to give a bargainer with greater bargaining power a larger fraction of the overlapping gains-from-trade (however, with an attendant loss in allocative efficiency). Chatterjee & Samuelson, *supra* note 96, at 841.

foundational contributions to the mechanism design literature, showing that the Chatterjee and Samuelson mechanism was the most efficient mechanism possible.⁹⁹ They formally proved that, given the parties' private valuation information, there are no negotiation procedures that produce higher expected gains of trade.

The power of the Chatterjee and Samuelson mechanism as a practical dispute resolution device is, however, severely limited by the requirement in their game that the potential buyer and seller are only given one opportunity to contract by placing single deposits into the settlement escrow mechanism. In 1995, Robert Gertner and Geoffrey Miller argued that settlement escrows could be beneficial even if they were merely a non-exclusive supplement to traditional bargaining and dispute resolution:

The [Myerson & Satterthwaite] result is fundamentally different from ours. We are interested in the effects of adding a settlement escrow to the existing bargaining game, not replacing the bargaining game with a different mechanism. In our approach, there is neither commitment to delay ordinary negotiations pending the outcome of the escrow process nor commitment to avoid further bargaining if the parties fail to settle in the settlement escrow. We argue that, independent of the bargaining game that exists, adding a settlement escrow is likely to improve settlement and unlikely to have any significant costs.¹⁰⁰

Laboratory experiments of Carnegie Mellon students conducted by Linda Babcock and Claudia Landeo have shown that just giving disputants a (non-exclusive) settlement escrow option can substantially increase bargaining efficiency.¹⁰¹ The Gertner and Miller distinction between exclusive and non-exclusive settlement escrows will have a central importance for this section's more general discussion of interest escrows. But, in some sense we will be traveling in the opposite direction – providing examples where shared-interest escrows can be imposed by contract as an exclusive means of expressing interest.

Non-exclusive settlement escrows have found considerable real-world traction. In 2001, the State of Nebraska mandated that all litigants “in district court civil actions that involve only monetary remedies” be given the opportunity to resolve their dispute by means of a settlement escrow administered by the state's “Office of Dispute Resolution.”¹⁰² The United States Patent and Trademark deemed a patent application concerning settlement escrows filed in 1998 to be novel and non-obvious and in 2001 issued a patent.¹⁰³ This patent,

⁹⁹ Roger B. Myerson & Mark A. Satterthwaite, *Efficient Mechanisms for Bilateral Trading*, 29 J. ECON. THEORY 265 (1983).

¹⁰⁰ Robert H. Gertner & Geoffrey P. Miller, *Settlement Escrows*, 24 J. LEGAL STUD. 87, 93 (1995).

¹⁰¹ Linda Babcock & Claudia M. Landeo, *Settlement Escrows: An Experimental Study of a Bilateral Bargaining Game*, 53 J. ECON. BEHAV. & ORG. 401 (2004).

¹⁰² NEB. REV. STAT. § 25-2924 (2001). The statutory provisions governing settlement escrows can be found in NEB. REV. STAT. § 2922 to 25-2929 (2001). The state's Office of Dispute Resolution made available a useful guide to the escrow process. NEB. OFFICE OF DISPUTE RESOLUTION, FORM FOR PARTY WISHING TO PARTICIPATE IN SETTLEMENT ESCROW PROCESS, available at <http://forms.justia.com/nebraska/statewide/district-court/miscellaneous/form-for-party-wishing-to-participate-in-24567.html> (last visited July 22, 2001). The program was discontinued in 2004 and the statutory provisions repealed in 2009. L.B. 1, 101st Leg., 1st Sess. (Neb. 2009). While the escrow option was in place, litigants deposited 252, but only 1 case ever settled using the escrow mechanism (apparently because most of the escrowed settlement offers were unreciprocated).

¹⁰³ See U.S. Patent No. 6,330,551 (issued Dec. 11, 2001) (“The computer matches the settlement offer against the claimant's demand and performs its programmed calculations in order to determine whether or not a settlement has been achieved. Where the demand and offer intersect in accordance with preestablished conditions, settlement is achieved.”). The patent application was filed three years after the publication of Gertner & Miller, *supra* note 100, but fails to mention it as prior art. See also U.S. Patent No. 6,850,918 (issued Feb. 1, 2005); U.S. Patent No. 6,954,741 (issued Oct. 11, 2005); U.S. Patent No. 7,249,114 (issued July 24, 2007) (failing to reference Gertner & Miller, *supra* note 100). In 2001, the game-theorist Barry Nalebuff with a

which has been licensed to the online (and offline) dispute resolution facility cybersettle.com, which has used a non-exclusive version of the Chatterjee and Samuelson settlement escrows to facilitate “over \$1.8 billion in settlement” arising out of more than 250,000 cases.¹⁰⁴ Settlement escrows are or have been offered by several other websites.¹⁰⁵

Non-exclusive interest escrows have also been used outside of the dispute resolution arena. In a dating escrow, for example, one person deposits into escrow his or her interest in going on a date with another specific person. The escrow remains undisclosed unless the escrow agent receives a matching escrow from the specified person indicating a matching interest to go on a date. Non-exclusive date escrows have been used at a number of colleges – including Harvard, Middlebury, Williams and Yale – which give graduating seniors the chance for a “last chance match” using a dating escrow algorithm.¹⁰⁶ For example, at Yale in 2004, the escrow matched 856 couples for a “last chance dance” from an escrow dataset of 5,143 “crushes” submitted to an online escrow database by 773 people:

The target of a crush is notified by an e-mail message that someone is interested Instead of listing their names, students can provide clues, such as, “A crush from freshman literature class.” If the target figures the clue out and is interested, they can also list that person as their crush if they hadn’t already. Before the dance begins, students are notified of the names of their matches.¹⁰⁷

The dating escrow is also available to undergraduates more generally at “anonymizing matching” websites, like www.goodcrush.com, where more than 30,000 crush deposits have been placed into escrow.¹⁰⁸ The site’s free “crushfinder” service allows

host of co-inventors unsuccessfully filed a patent application expressly invoking the concept of “information escrows.” See WO/2001/080058 A Negotiation Protocol Using a Third-Party Information Escrow.

¹⁰⁴ *How Cybersettle Works*, CYBERSETTLE, <http://www.cybersettle.com/pub/home/demo.aspx> (last visited Oct. 6, 2011). The Cybersettle mechanism allows each disputant to deposit up to three different rounds of bidding – testing each successive round for overlapping deposits. Russell Weis, *Some Economic Musing on Cybersettle*, 38 U. TOL. L. REV. 89, 91 (2006). The Federal Circuit in construing the ‘511 claims concluded that to practice the independent claims would “require the receipt of at least two demands and at least two settlement offers.” *Cybersettle, Inc., v. Nat’l Arbitration Forum, Inc.*, 243 Fed. Appx. 603 (Fed. Cir. 2007). The Cybersettle mechanism also modifies the Chatterjee and Samuelson split-the-overlap price with a “20% exception”: “The final settlement can never exceed the demand by more than 20%. For example, if the offer is \$100,000 and the demand is \$5,000, the case will not settle for the median (\$52,500); it will instead settle for \$6,000 (20% above \$5,000).” Weis, *supra*, at 91. See also Bruno Deffains & Yannick Gabuthy, *Efficiency of Online Dispute Resolution: A Case Study*, COMM. & STRATEGIES, Oct. 1, 2005, at 201 (arguing that Cybersettle’s 20% rule “creates some crucial inefficiencies”).

¹⁰⁵ See Melissa Conley Tyler & Di Bretherton, *Seventy-six and Counting: An Analysis of ODR Sites*, in PROCEEDINGS OF THE ODRWORKSHOP.ORG, EDINBURGH, JUNE 28 2003, at 13 (A.R. Lodder et al. eds., 2003) (providing as additional examples: ClickNsettle, Intersettle, e-settle.co.uk, MARS, Settlement Online, WeCanSettle, The Claim Room, WebMediate and Dispute Manager).

¹⁰⁶ See, e.g., *The Last Chance Match*, HARVARD COMPUTER SOCIETY, <http://www.hcs.harvard.edu/class2010/lastchancematch/register.html> (last visited Oct. 6, 2011).

¹⁰⁷ Nicholas Zamiska, *Before Graduation at Yale, A Last Chance for Romance*, N.Y. TIMES, May 30, 2004, <http://www.nytimes.com/2004/05/30/nyregion/before-graduation-at-yale-a-last-chance-for-romance.html>. The average depositor submitted more than six crushes – leading to more matches 856 than people submitting. This suggests that at least some submitters were not looking to connect with that special someone but those special someones.

¹⁰⁸ GOODCRUSH, <http://www.goodcrush.com/crushes> (last visited July 22, 2001). See *Anonymous Matching*, WIKIPEDIA, http://en.wikipedia.org/wiki/Anonymous_matching (last visited Oct. 6, 2011) (“Anonymous matching is a matchmaking method facilitated by computer databases, in which each user confidentially selects people they are interested in dating and the computer identifies and reports matches to pairs of users who share a mutual attraction.”). A half dozen other websites have provided crush escrows – including eCRUSH.com (targeted to the teen market and claiming, “more than 1.6 million users and . . . more than 600,000” matches); DoYOU2.com; LiveJournal Secret Crush meme; SecretAdmirer.com (claiming 100,000 successful matches); someonelikesyou.com; crushlink.com; Crush Notifier (facebook app). *Id.* See also Katharine Mieszkowski, *The*

students at more than two-dozen colleges to enter the email addresses of up to five crushes. These objects of affection are invited to submit their own crushes. If (and only if) the email addresses of two similarly inclined people match is the information revealed.¹⁰⁹ Crushfinder by some measures has found the kind of quick adoption reminiscent of Facebook.¹¹⁰ When Princeton undergrad Josh Weinstein launched the site in the Spring of 2007 for his fellow undergraduates, thirty percent of the student body signed up with twenty-four hours.¹¹¹ As with settlement escrows, the United States Patent and Trademark office has found the crush escrow to be sufficiently novel and non-obvious to warrant patent protection.¹¹² The dramatic success of interest escrows in the two different contexts of dispute resolution and dating is one impetus for us asking where else might the technique be usefully employed.

1. Rationales for Shared-Interest Escrows

Interest escrows share some of the same attributes as allegation escrows. With allegation escrows, the allegation depositor is also trying to discover whether someone else exists who is interested in filing a complaint against the same professor. But unlike the settlement or dating escrows, the allegation depositor doesn't know the identity of the person with whom she is trying to discover a shared interest or even whether such another person exists (i.e. a victim of sexual harassment). Moreover, allegation escrows and shared-interest escrows have distinct rationales. Allegation escrows help potential allegeders overcome their reluctance of lodging claims against third-parties directly. Shared-interest escrows can analogously help speakers overcome reluctance of expressing interest directly, but we'll show below that these escrows can also cause usefully deter some speakers from directly expressing their interests. With allegation escrows, the reluctance to claim directly came from a fear about the response other from those with whom a depositor is trying to discover a shared interest in claiming. In contrast, the reluctance to directly express interest stems from a fear about the response from other potential depositors. Shared-interest escrows are called for in circumstances where a group of people might be better off if they discovered a shared interest, but direct expressions of interest, particularly when the interest is not mutual, would be detrimental to a group's joint interests.

To illustrate this possibility, this Section uses as its motivating example the employer problem of regulating how workers initiate consensual romantic relationships.¹¹³ In this context, direct communication of interest can be unwanted and counterproductive. Some people dislike having to say "no" to an invitation, or even find refusing difficult. Even coworkers that agree to go out on a date may have preferred not to have been asked. Other people may be reluctant to be the first to ask even if they are confident that their interest is reciprocated. But this reluctance to ask can be intensified when the sender is uncertain about whether the offer will be accepted. Rejection aversion thus can come in two forms: offeror

Bot *Who* *Loved* *Me,* SALON, Aug. 7, 2002,
<http://dir.salon.com/story/tech/feature/2002/08/07/crushmaster/index1.html> (last visited Oct. 6, 2011)
 (describing crush escrow sites).

¹⁰⁹ *Id.*; see also, Hannah Seligson, *Will My Love Say Yes? College Kids Ask This Website*, WALL ST. J., July 16, 2010, <http://online.wsj.com/article/SB10001424052748704111704575355323155530784.html>.

¹¹⁰ THE SOCIAL NETWORK (Columbia Pictures 2010).

¹¹¹ Patricio Martinez, *Online Dating Site Aims to Aid Lovestruck Cornellians*, CORNELL DAILY SUN, Feb. 12, 2010, <http://cornellsun.com/node/40726>.

¹¹² U.S. Patent No. 5,950,200 ("Method and apparatus for detection of reciprocal interests or feelings and subsequent notification") (issued September 7, 1999).

¹¹³ Google has provided its employees with a non-exclusive crush escrow option. MG Siegler, *Googlers Can Finally Find Their Parisian Love with GoogleCrush*, TECHCRUNCH (Feb. 12, 2010), <http://techcrunch.com/2010/02/12/googlecrush-parisian-love>. Gertner & Miller, *supra* note 100, explain why direct communication of settlement offers might lead to less efficient negotiation.

aversion to being rejected and offeree aversion to having to reject.¹¹⁴ Offeror aversion produces a first-mover disadvantage in communicating expressions interest. If two people are interested in each other, but both are averse to being the first to expressing interest, they may never discover their shared interest.

Interest escrows can help mitigate both offeror and offeree rejection aversion. Escrows relieve offerors of the burden of directly asking. Shy people can express their interest through an escrow deposit without the possible unpleasantness of putting themselves forward. When there is a risk that an offer itself will be unwanted, shared-interest escrows relieve offerees from the burden of declining offers. More subtly, shared-interest escrows prevent a rejection from becoming common-knowledge between the offeror and offeree (and, potentially, third-party co-workers). There is an important difference between first-order knowledge of some fact, and what Ian Ayres and Barry Nalebuff have termed “higher-order knowledge.”¹¹⁵ For example, first-order knowledge of interest might be of the form “Mitt knows that he is interested in going on a date with Jane.” The primary goal of direct communication (asking Jane out) is to transmit this fact (“Mitt is interested in going on a date with Jane”) to Jane – so that she also possesses the first-order knowledge. If the direct communication is successful at transmitting the first-order knowledge, it would be true that “Jane knows that Mitt is interested in going on a date with Jane”). However, direct communication can convey potentially an infinite amount of higher-order information – as depicted in Table 4:

Table 4: Possible Hierarchy of Beliefs	
Mitt’s Knowledge	Jane’s Knowledge
1a. Mitt knows <i>K</i>	1b. Jane knows <i>K</i>
2a. Mitt knows that Jane knows <i>K</i>	2b. Jane knows that Mitt knows <i>K</i>
3a. Mitt knows that Jane knows that Mitt knows <i>K</i>	3b. Jane knows that Mitt knows that Jane knows <i>K</i>
And so on . . .	And so on . . .

If the communication is clear, 2a is true: Mitt knows that Jane knows that Mitt is interested in going on a date with her. And 3b is true: Jane knows that Mitt knows that Jane knows that he is interested in going on a date. This interconnected sequence of higher-order information goes on ad infinitum.¹¹⁶ Of course, even before communicating, Mitt already knew (1a) that he was interested in going out with Jane. But after asking her out, now Jane not only has first-order information (1b, in that she knows that Mitt is interested in going out with her), she also has higher-order information (2b, in that Jane knows that Mitt knows). And (3a) now Mitt knows that Jane knows that Mitt knows that Mitt is interested. Game-theorist define common-knowledge as the existence of this double infinity of beliefs about some piece of knowledge *K*.¹¹⁷

¹¹⁴ Offerees would be wise to cultivate an attitude of being less averse to (counter)offering than rejecting – so that they are more likely to discover potential gains of trade. Ian Ayres, *Never Say No: The Law, Economics, and Psychology of Counteroffers*, 25 OHIO ST. J. ON DISP. RESOL. 603 (2010).

¹¹⁵ Ian Ayres & Barry Nalebuff, *Common Knowledge as A Barrier to Negotiation*, 44 UCLA L. REV. 1631 (1997).

¹¹⁶ The sequence is interconnected, because an unmistakable belief in 3a implies 2b which in turn (if true) implies 1a. By analogy, 51b would imply 50a, 49b, 48a, and so on, all the way to 1b.

¹¹⁷ One of the surprising implications of common-knowledge theory is that “*when we teach, we learn.*” Ayres & Nalebuff, *supra* note 115, at 1631. By directly teaching Jane of his interest, Mitt sometimes unavoidably learns (2a, 3a, etc.).

If Mitt asks co-worker Jane out and she declines, the facts of both his interest and her disinterest become common-knowledge between Mitt and Jane – formally four infinite sequences of knowledge statements ending with “Mitt knows he is interested,” “Jane knows he is interested,” “Mitt knows she is not interested,” and “Jane knows she is not interested.” Or put differently, there will two infinite sequences that begin with “Mitt knows” and two infinite sequences beginning with “Jane knows.”¹¹⁸

In contrast, an unreciprocated expression of an interest intermediated by an interest escrow produces a very different constellation of knowledge beliefs. In both settings, the parties start out with private first-order information. For example, imagine that before communicating Mitt knows that he is interested; and Jane knows she is not interested.¹¹⁹ After Mitt places a deposit in escrow that is not reciprocated with a matching expression of interest, the coworkers have much more limited knowledge. Instead of two infinite sequences beginning with “Mitt knows,” we find that Mitt only learns the first-order information that Jane has not made a matching deposit. At most, Mitt might be able to infer the first-order information that Jane is not interested. But other inferences are possible – Jane might have been busy and just not thought to place deposits for people in which she is interested. The impact of the escrow on Jane’s knowledge is even more severe. Instead of two infinite sequences beginning with “Jane knows,” we find that Jane’s information set has remained completely unchanged. She doesn’t gain the first-order information about his interest: she doesn’t know that Mitt is interested in her, because she doesn’t know that he made a deposit. Moreover, she doesn’t even know that he knows that she didn’t make a matching deposit (again because she doesn’t know that he made an interest deposit).

The difference between these two radically different information sets is important because common-knowledge about an embarrassing or awkward fact can be deleterious to a productive relationship among co-workers.¹²⁰ The problem with direct communication isn’t just that Jane learns the first-order fact of his interest and he learns the first-order fact of her disinterest, the normal result of direct communication is also to create the multiple infinities of higher-order knowledge. Without Jane’s disinterest being common knowledge it is easier for both Jane and Mitt to continue working together as if nothing happened. This is particularly easy for Jane, because with the escrow, as far as she knows, nothing has happened. But forestalling higher-order information about her disinterest also makes it easier for Mitt – even if he is able to infer her disinterest from the absence of an escrow match. Because Mitt knows that Jane *does not* know of the non-match, it’s easier for him to continue to act as if nothing has changed.

The foregoing analysis assumes that direct communication of Mitt’s interest and Jane’s disinterest communicates with certainty first-order and higher-order information. But in the real world, direct communication might only create probabilistic information or uncertain beliefs. In particular, if Jane suffers from offeree rejection aversion (or if she doesn’t want to be mean to Mitt, she might decline by means of a white lie (“I’m just waaaaay too busy to date these days”)), thereby introducing ambiguity into the sequences.¹²¹

¹¹⁸ For example, one Jane sequence begins: Jane knows that Mitt is interested; Jane knows that Mitt knows that Jane knows that Mitt is interested, etc. The other Jane sequence begins: Jane knows she is not interested; Jane knows that Mitt knows that Jane is not interested, etc.

¹¹⁹ Of course, it is possible that Jane may not have considered whether she has an interest; and it is possible that Mitt has a probabilistic belief about her interest. See Ayres & Nalebuff, *supra* note 115.

¹²⁰ *Id.* (showing deleterious impact of threatening or embarrassing information in a variety of contexts).

¹²¹ To avoid the deleterious effects of common-knowledge but probabilistically communicate first-order information, speakers will sometimes intentionally make ambiguous their message. “Care for a breath mint?” or “Did you see they are having a sale on deodorant?” might strike a better balance on communicating first-order information while not communicating higher-order information than saying directly that a person has halitosis or body-odor. Ayres & Nalebuff, *supra* note 115, at 80.

A white lie might produce a less uncomfortable mix of first-order and higher-order communication. With a more ambiguous rejection:

- Mitt knows he is interested. Mitt suspects she is uninterested, but he's not sure (she might, after all, really be too busy to date these days). He definitely doesn't know whether she knows that he suspects but doesn't know if she is uninterested.
- Jane knows Mitt is interested. Jane knows she is uninterested. Jane suspects that Mitt might have seen through her white lie and that he might know she is uninterested, but she's not sure. She doesn't know if he knows that she thinks he suspects she is uninterested.

Offeree's ambulation and white lies, if effective, can disrupt some of the unpleasantness of common knowledge. But the burdens of unrequited interest are still likely to be better and more comfortably avoided when Mitt's interest is expressed via the escrow mechanism. The escrowed expression of unrequited interest reduces (relative to the white lie) both Mitt's and Jane's probabilistic estimate of the other person's knowledge, and in Jane's case the escrow leaves her estimate of Mitt's interest unchanged, since she never learns of his escrow deposit. Moreover, the white lie response is more likely to subject Jane subsequent invitations that impose more rejection-averse burdens and ultimately more likely to make Jane's disinterest common knowledge. It is also more likely to subject Mitt to the harms associated with public or direct rejection, should Jane at some point abandon her white lie approach.

As in our earlier model, the escrow depositors are likely to come from predictably different types of players. Our sexual harassment model distinguished between "silent" victims (victims who would have remained silent in the absence of the escrow option) and "direct" victims (victims who would have lodged a direct, unintermediated complaint in the absence of the escrow option). Here, it is useful to distinguish between three types of interested workers:

A "silent" is a worker who is interested in going out with a particular co-worker, but would remain silent in the absence of a shared-interest escrow.

A "direct" is a worker who would directly express his or her interest in the absence of a shared-interest escrow; and

A "hinter" is a worker who would indirectly express (via hints of varying ambiguity) his or her interest in the absence of a shared-interest escrow.

The new hinting expressions of interest are analogous to the ambiguous (white lie) expressions of disinterest discussed above. A hinter engages in a variety of behaviors of varying ambiguity and subtlety (for example, including everything from meaningful glances and flirting to unwanted leers and invasion of personal space). As shown in Table 5, the creation of a shared-interest option is likely to cause some proportion of each of these groups to shift toward using escrows.

Silent	-
Hinter	+/-
Direct	-
Escrow	+

The diagram shows three vertical arrows pointing downwards from the 'Silent', 'Hinter', and 'Direct' rows towards the 'Escrow' row. A curved arrow also points from the 'Hinter' row towards the 'Escrow' row, indicating a shift in behavior towards using escrows.

The shift benefits the Silents who chose to express their interest with an escrow deposit and it does so without potentially unwanted hinting or direct communication (with the potentially deleterious common knowledge). Theory suggests that fewer employees with interest will remain purely passive when escrowed communication becomes a possibility. An escrow is a shy person's ally.

We also predict that with escrow mechanisms in place, there would be fewer direct communication of interest among coworkers. This would most clearly be true if the employer implemented an exclusive escrow – mandating that employees could only express initial interest in going out via the escrow (and sanctioning employees who directly asked out coworkers). But the reduction in Directs is also likely to be true, albeit to a more muted degree, in a workplace that merely provides shared-interest escrows as a non-exclusive option. With this new option, some employees who would have communicated directly are likely (because of rejection aversion) to communicate indirectly via the escrow. The shift of the Silents toward the escrow comes close to a Pareto improvement, helping the Silents find love without imposing costs on others. But imposing an exclusive escrow on Directs, some of whom would have preferred to continue to express direct interest requires justification. One employer justification would be to reduce the negative externalities that unwanted direct communication can create. Unwanted direct communication can impose dignitary costs recipients. What’s more, the deleterious impact that common knowledge of unrequited love can have on coworker productivity is not fully internalized by the worker in choosing whether or not to take the chance of directly expressing his or her interest.

Table 5, however, suggests that escrow mechanisms might either increase or decrease the amount and types of hinting that occurs on the job. On the one hand, an exclusive escrow mechanism might prohibit hinting as well as direct communication of interest. And one might imagine corporate cultures in which flirting become transgressive – in part because employees have the ability to express their interest through the less harassing escrow. On the other hand, an employee who has deposited her interest about another employee in escrow may have increased incentives to signal that deposit by engaging in various forms of indirect communication. This is particularly true with regard to exclusive escrows – in which employees who are prevented from engaging in direct communication may find that escrow plus hinting is their closest alternative. Even employees who would have remained silent might after depositing an escrow begin to send indirect hints.¹²² The ambiguous impact of escrows on the amount and type of indirect communication undermines any a priori argument in favor of their use. Some hinting behaviors can be more harassing than merely unwanted direct communication. Still, the most egregious forms of hinting might be subject to employer sanctions. Moreover, the prior discussion of common knowledge is at least strongly suggestive that employers have a strong interest in avoiding direct communication of both interest and disinterest.¹²³

2. Design

The most important human resources choice confronting an implementing employer is whether or not the escrow should be the exclusive means of expressing interest. Some workplaces allow employees to ask out a coworker once, but effectively prohibit employees from repeatedly asking out a co-worker after they are initially rebuffed.¹²⁴ This policy

¹²² In the extreme, we can imagine that some hints might even be unconscious, or at least unplanned.

¹²³ Perhaps the most obvious example is one in which an employee supervisor would like to approach another, subordinate employee. In such a case a direct expression of interest, even reciprocated interest, might toe the line of harassing behavior. Preventing such communication in all cases but those in which the subordinate has expressed clear and unambiguous interest might help to avoid potentially harassing contact, or benefit communication between those co-workers who would otherwise be prohibited from expressing even mutual interest.

¹²⁴ Policies on workplace dating and how co-workers can communicate to express an interest vary widely, and indeed many companies rely almost entirely on informal policies and norms discouraging relationships, rather than written rules prohibiting unwanted contact. Policies forbidding all or repeated contact nevertheless exist in non-trivial numbers, across all kinds of corporate entities. For a more detailed description of the breadth and

creates a kind of one-bite rule where it is okay to make one potentially unwanted overture as long as the worker does not persist after learning that his or her interest is not reciprocated. An exclusive escrow replaces a one-bite rule with a no-bite rule. The employer would require that dating interest be initially communicated through a shared-interest escrow mechanism. An intermediate implementation would require the escrow as the exclusive means for a superior to express dating interest in a subordinate, but allow coworkers of equal standing (and possibly subordinates) to express interest either directly or through the escrow.

Some critics might argue that exclusive interest escrows unacceptably burden workers' freedom of speech. An exclusive escrow regime prohibits certain forms of direct communication. But courts have routinely allowed employers, as a condition of employment, to restrict employee speech.¹²⁵ The employer goal of prophylactically reducing harassment is related to legitimate employment goals. Indeed, implementing an escrow might be part of an employer's attempt to use "reasonable care to prevent" a hostile work environment.¹²⁶

Escrow designers must also decide whether deposited information will be used for any purposes prior to a match. For example, most crush websites send the target of a crush deposit an email indicating an unnamed someone has deposited a crush with their name (and email address).¹²⁷ The websites send anonymized interim messages in order to increase the viral usage of their sites. The concern with this type of interim message at the work place is that even anonymous messages might be unwanted communications by some recipients.¹²⁸ On the other hand, a system which does not forward interim messages might be more likely to prompt depositors to "hint" (so as to signal that they have made a deposit) in ways that are even more unwanted. At a minimum, potential recipients of these interim messages should be given the option to opt *not* to receive them. Recipients of interim messages might also be given the option of sending back a message that they are not interested in matching with any coworker.

A less intrusive form of interim reporting would simply reveal to the workforce the number of deposits that had been made to the escrow (and possibly the number of matches). Reporting the number of deposits and the number of matches might make the escrow option more salient and give potential depositors some idea of the chance that their escrow will blossom into a match. However, even this level of aggregate anonymized reporting might be deemed to overly sexualize the workplace.¹²⁹

nature of workplace dating policies, see Kathleen Riach and Fiona Wilson, *Don't Screw the Crew: Exploring the Rules of Engagement in Organizational Romance*, BJOM, Vol. 18, 79–92 (2007) at 85. For one of the original studies on the topic, see Gary N. Powell and Sharon Foley, *Something to Talk About: Romantic Relationships in Organizational Settings*, J. OF MGNT, Vol. 24, No. 3, 421-448 (1998).

¹²⁵ See, e.g. *Hudgens v. NLRB*, 424 U.S. 507, 513 (1976), *Flagg Bros. v. Brooks*, 436 U.S. 149, 159-60 (1978), and *Pickering v. Board of Educ.*, 391 U.S. 563 (1968)

¹²⁶ See, e.g., *Faragher v. Boca Raton*, 524 U.S. 775, 807 (1998); *Burlington Industries, Inc. v. Ellerth*, 524 U.S. 742, 765 (1998), as well as our discussion of Title VII law, *supra* Subsection I.C.2.

¹²⁷ For example, CrushFinder sends an email saying: "Someone has a crush on you . . . find out who at Goodcrush.com . . . Go get 'em Tiger." E-mail from CrushFinder, to Ian Ayres (July 22, 2011) (on file with author). The Facebook application Crush Notifier does not send interim messages. Facebook apparently does not allow applications to send anonymous emails to Facebook users who have not already downloaded the application.

¹²⁸ A similar problem arises in the adoption context. Some states give biological parents no way to opt-out of being contacted by a "confidential intermediary" on behalf of an adult adoptee, while others merely presume consent to be contacted and require an affirmative opt-out to prevent the disclosure of contact information to the adult adoptee. See discussion *infra* Subsection II.B.1.

¹²⁹ But see Vicki Schultz, *The Sanitized Workplace*, 112 YALE L.J. 2061 (2003) (arguing that workplace sexuality is not always discriminatory or disruptive). Revealing to a work force that there were four times as many crush deposits as employees, for example, might send a message unwanted by an employer and some employees. A crush escrow accordingly might also limit the number of crushes that an individual employee

Finally, a crush escrow would need to decide how best to release information of matches. The simplest implementation would simply send an immediate notification of the match to the two matching individuals. But a system of non-immediate disclosure may further the employees' interest in preserving ambiguity about who indicated an interest first. A problem with immediate disclosure is that it makes clear to both parties who was the first to make a crush deposit and who was the second. Just as some people might prefer to be asked out rather than to do the asking, it is possible that some people might prefer to be the "crushee," to be the second-person to make a matching deposit. Immediate disclosure escrows might reduce the number of crush deposits because some people might not want to take the risk that they will be shown to have put in the first crush. Immediate disclosure escrows might thus create a kind of first-mover disadvantage with regard to the escrow deposits themselves.¹³⁰

In contrast, an escrow mechanism that discloses matches to the two participating individuals with only scheduled periodic release times or randomly chosen lag might usefully ambiguate who made the initial deposit.¹³¹ With scheduled or randomized lags, each party would need to wait at least a few days before learning of the match. An initial depositor who placed a deposit a year in advance of the match notice might have private information that she made the first deposit, but the second depositor because of the lag would not be sure whether she was the first or second deposit. Forestalling common knowledge of who was the escrow hunter and the hunted might impact escrow participation rates.

It would also be possible to design the matching algorithm so that the escrow agent would also provide the employer's human resources department contemporaneous information about the existence of the employees' match in dating interest. Some employers prefer or even require that employees disclose to management when they have begun a relation – in part to manage job assignments so as to minimize conflicts of interests.¹³² In our view, however, revealing information of match at such an early stage of a relation – literally before the first date – might be too intrusive and even detrimental to the employees' associational freedoms. Employees knowing that any match will be disclosed to the HR department may be less inclined to use the escrow and resort to dispreferred hinting or direct communication. On net, we think the costs of such contemporaneous disclosure outweigh its benefits. At minimum, if employers are to learn from escrow agents the identity of matched

might have at any one time. See Ayres & Nalebuff, *Cupid and Colleges*, Forbes (May 21, 2001) (discussing "rose mechanism" of credibly signaling interest). Unlike the allegation escrow, see *supra* Section I.B, we would allow crush deposits to be cancelled at anytime pre-match.

¹³⁰ Crush escrows with immediate disclosure might have two competing effects. On the one hand, the escrow gives people who are unwilling to ask someone else out directly, an indirect mechanism of expressing interest. On the other hand, the mechanism creates the possibility that someone else will learn that he or she was the second to make the deposits. These two effects might disproportionately impact women – who for a variety of cultural reasons might feel disinclined to be seen as the pursuer in a relationship. See, e.g., H. Colleen Sinclair & Irene Hanson Frieze, *When Courtship Persistence Becomes Intrusive Pursuit: Comparing Rejecter and Pursuer Perspectives of Unrequited Attraction*, 52 SEX ROLES 839, 842 (discussing gender differences and perceptions regarding pursuers). Josh Weinstein, the creator of GoodCrush, (and now www.youare.tv, where you can "play game shows from your web cam") crunched some numbers from the website for this Article and reports that out of 553 heterosexual matches, 52.6% were initiated by females (although he is also quick to add that the inferences that can be drawn from this statistic are limited because (a) a large proportion of matches (45.0%) were initiated by crushers who opted not to disclose their gender) E-mail from Josh Weinstein, Creator, GoodCrush, to Ian Ayres (7/27/11, 3:01 am) (on file with author).

¹³¹ As discussed above with regard to allegation escrows, *supra* Subsection I.C.4, a system with periodic release would only communicate the new matches that occurred at the end of each period (say, once a week on Monday at 5 p.m.). Randomized lags might release the escrow pursuant to some randomized (undisclosed) algorithm.

¹³² For a discussion of the variety of workplace policies on disclosure, including encouraged or required disclosure, see Charles A. Pierce, Donn Byrne, and Herman Aguiñi, *Attraction in Organizations: A Model of Workplace Romance*, JOB, vol. 17, 5-32 (1996)

employees, it is important that this policy is clearly disclosed to depositors at the time of the deposit.

II. APPLICATIONS

Allegation and shared-interest escrows have a broad range of potential applications in addition to our central examples of sexual harassment complaints and intra-office dating. In this section we will rely on the theoretical foundation developed in Part I to explore whether the prerequisites for useful application of the escrow tool exist. The goal of this Part, then, is to identify new potential applications and to assess whether an escrow is likely to be on net socially beneficial.

A. *Practical Applications for Allegation Escrows: Sexual Harassment and Beyond*

1. Sexual Harassment

It is common in high-profile incidents of sexual harassment to have other victims step forward with similar accusations. Perhaps most currently salient and disturbing is the story of Jerry Sandusky, who until recently was a popular defensive coordinator for the Pennsylvania football team. Since Sandusky's arrest in early November 2011 on charges of child molestation, ten additional victims (so far) have come forward and alleged similar abuse.¹³³ The tremendous damage that the University has suffered as a result of the sheer number of accusations, to say nothing of the alleged harm to the children, highlights both why schools might feel pressure to uncover as many claims of abuse as possible, and why they might benefit from the use of allegation escrow systems in that effort.

Stories of high profile follow-on complaints are also common in national and global politics. Shortly after Nafissatou Diallo's accusation led to Dominique Strauss-Kahn being charged with sexual assault, Tristane Banon, a French journalist, publicly accused Strauss-Kahn of attempted rape.¹³⁴ Similarly, after a sexually suggestive picture was sent via Twitter from Representative Anthony Weiner to a woman in Seattle, Weiner acknowledged "having had inappropriate online exchanges with at least six women."¹³⁵ In another example, Bill Clinton was subjected to multiple allegations of sexual misconduct throughout the 1990s in

¹³³ See Mark Viera and Jo Becker, *Ex-Coach Denies Charges Amid New Accusations*, N.Y. TIMES, November 14, 2011, http://www.nytimes.com/2011/11/15/sports/ncaafotball/jack-raykovitz-chief-of-second-mile-resigns-amid-penn-state-scandal.html?_r=2. If true, the charges against Sandusky suggest that he repeatedly and severely sexually abused young boys in his care. Beyond the indescribable tragedy of the harm done to the children, the scandal surrounding Sandusky's arrest has already had a profound impact on Penn State as an institution. Other members of the coaching staff, including Joe Paterno, a much-loved (at least until the scandal) school fixture who holds the record for most seasons coaching college football, have been fired as a result and their alleged failures to properly address the abuse. In addition, some members of the administration have been dismissed and charged with perjury in connection to the case. *Id.*

¹³⁴ See Al Baker & Steven Erlanger, *I.M.F. Chief, Apprehended at Airport, Is Accused of Sexual Attack*, N.Y. TIMES, May 14, 2011, <http://www.nytimes.com/2011/05/15/nyregion/imf-head-is-arrested-and-accused-of-sexual-attack.html>; Maïa de la Baume, *Tristane Banon Frees Herself by Speaking Out*, N.Y. TIMES, July 22, 2011, <http://www.nytimes.com/2011/07/23/world/europe/23banon.html>. Neither case was successful, as U.S. prosecutors eventually dropped all charges against Strauss-Kahn and French prosecutors declined to pursue criminal charges as well. See John Eligon, *Strauss-Kahn Drama Ends With Short Final Scene*, N.Y. TIMES, Aug. 23, 2011, <http://www.nytimes.com/2011/08/24/nyregion/charges-against-strauss-kahn-dismissed.html>; Steven Erlanger & Maïa De La Baume, *Strauss-Kahn Is Not Charged in French Case*, N.Y. TIMES, Oct. 13, 2011, <http://www.nytimes.com/2011/10/14/world/europe/dominique-strauss-kahn-cleared-of-attempted-rape-of-tristane-banon.html>.

¹³⁵ Michael Barbaro, *Weiner Admits He Sent Lewd Photos; Says He Won't Resign*, N.Y. TIMES, Jun. 12, 2011, <http://www.nytimes.com/2011/06/07/us/politics/07weiner.html>.

the wake of the Paula Jones sexual harassment lawsuit.¹³⁶

Beyond these high profile cases, however, empirical studies on sexual harassment support the idea that information escrow systems can add value to current reporting systems. Escrow systems are of course useful only inasmuch as a perpetrator is likely to harass multiple victims. An early study on sexual harassment in the federal government found that “many women and men reported that their harasser had also bothered others at work.”¹³⁷ A more recent, statistical study based on labor arbitration decisions summarized the number of victims per perpetrator:

Table I Descriptive statistics and correlations

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
1. Number of targets	2.32	2.12	92	-							
...											
8. Number of incidents	4.77	3.58	92	.32	.09	.18	.30	.42	.38	.55	-

¹³⁸ This data indicates that perpetrators of sexual harassment typically harass multiple victims, comporting with research that has found a recidivism rate for general sex offenders of 61.1%.¹³⁹

Nonetheless, there are significant barriers to reporting sexual harassment, making it difficult to assess the extent of the problem. Studies seeking to measure the incidence and prevalence of sexual harassment tend to rely on surveys which, while useful, are subject to selective-response, lack of response, and other methodological issues.^{140&141} A leading direct survey suggests that the prevalence of sexual harassment on post-secondary campuses remains shockingly high.¹⁴² Of those students surveyed, 62% indicated that they had been sexually harassed in some way.¹⁴³ Even more alarming, in a phone survey, 2.8% of the college women respondents indicated that they had experienced either an attempted or a completed rape¹⁴⁴ in the previous 6.21 months.¹⁴⁵ A follow-up study further found that just

¹³⁶ See *Woman Says Clinton Made Advance in '91*, N.Y. TIMES, Feb. 12, 1994, <http://www.nytimes.com/1994/02/12/us/woman-says-clinton-made-advance-in-91.html> (reporting the Paula Jones sexual harassment lawsuit); Francis X. Clines & Jeff Gerth, *The President Under Fire: The Overview; Subpoenas Sent As Clinton Denies Reports of an Affair With Aide at White House*, N.Y. TIMES, Jan. 22, 1998, <http://www.nytimes.com/1998/01/22/us/president-under-fire-overview-subpoenas-sent-clinton-denies-reports-affair-with.html> (reporting the Monica Lewinsky scandal); Francis X. Clines, *Testing of a President: The Accuser; Jones Lawyers Issue Files Alleging Clinton Pattern of Harassment of Women*, N.Y. TIMES, Mar. 14, 1998, <http://www.nytimes.com/1998/03/14/us/testing-president-accuser-jones-lawyers-issue-files-alleging-clinton-pattern.html> (reporting attempt “to portray Mr. Clinton as repeatedly engaging in sexual harassment of female underlings from his executive positions in government,” including testimony from Kathleen Willey).

¹³⁷ U.S. MERIT SYSTEMS PROTECTION BOARD, SEXUAL HARASSMENT IN THE FEDERAL WORKPLACE: IS IT A PROBLEM? 25 (1981), available at <http://www.mspb.gov/netsearch/viewdocs.aspx?docnumber=240744&version=241014&application=ACROBAT> (emphasis added).

¹³⁸ Margaret A. Lucero, et. al., *An Empirical Investigation of Sexual Harassers: Toward a Perpetrator Typology*, 56 HUMAN REL. 1461, 1470 (2003).

¹³⁹ Ron Langevin, et. al., *Lifetime Sex Offender Recidivism: A 25-Year Follow-Up Study*, CAN. J. CRIMINOLOGY & CRIM. JUST. 531, 545 (2004).

¹⁴⁰ For a discussion of the concerns associated with direct surveys asking questions about sensitive topics, see Arijit Chaudhuri & Rahul Mukerjee, RANDOMIZED RESPONSE: THEORY AND TECHNIQUES 2-24 (1988).

¹⁴¹ We also imagine that the data available from surveys seeking to identify perpetrators of sexual harassment on college campuses is particularly vulnerable to such concerns.

¹⁴² AAUW REPORT, *supra* note 1.

¹⁴³ *Id.* at 15, fig. 2.

¹⁴⁴ Under Title IX, rape and sexual assault are considered a serious, violent form of sexual harassment.

¹⁴⁵ BONNIE S. FISHER, FRANCIS T. CULLEN & MICHAEL G. TURNER, DEP’T OF JUSTICE, THE SEXUAL VICTIMIZATION OF COLLEGE WOMEN 10 (2000).

4% of rape victims inform a college official, while only 2.1% of victims report incidents to police.¹⁴⁶ Finally, a 2007 study found that college rape victims are more likely than victims of other types of crime to be repeat victims.¹⁴⁷ Such repeat victimization may contribute to a high rate of underreporting, particularly when measured on an incident-by-incident basis.

There is reason to be skeptical of the conclusions in both of these studies, since the very factors that make underreporting a problem may also lead to unreliable responses to a direct survey. Studies focusing on existing reports are clearly insufficient, and surveys are both highly sensitive to design issues and notoriously inaccurate.¹⁴⁸ School administrators and policy makers do not need to know the full and precise extent of sexual harassment on campus, however, to recognize that both harassment and under-reporting are serious problems. Because the likelihood that matched reporting will augment total reports increases as the prevalence and underreporting¹⁴⁹ of harassment rise, the data above suggest that college and universities are good candidates for allegation escrow systems.

Studies addressing sexual harassment among working adults indicate that the prevalence of sexual harassment in the workplace is equally alarming. Some studies suggest that perhaps as many as 50% of women in the workplace have experienced some type of sexual harassment and that harassment targets tend to be repeat victims.¹⁵⁰ Female employees also often decline to apply the “harassment” label to incidents that otherwise meet all definitions of sexual harassment, perhaps in an effort to improve their working environments by ignoring inappropriate conduct, or because they are reluctant to acknowledge that the incidents have upset them.¹⁵¹ As with educational settings, data indicating a high prevalence of sexual harassment in the workplace suggest that workplace harassment reporting may be a particularly promising application for information escrow systems.

2. Other Workplace Applications of Allegation Escrows

Beyond our principal examples of sexual harassment reporting in the universities and workplaces, properly tailored allegation escrow systems have the potential to significantly and positively impact information sharing in a wide variety of contexts. Students, employees and citizens experience harassment and discrimination on ethnic, racial, religious, sexual, and other bases. Indeed, because efforts to pass national legislation that would prevent discrimination on the basis of sexual orientation have as of yet failed¹⁵², escrow measures

¹⁴⁶ Bonnie S. Fisher et al., *Reporting Sexual Victimization to the Police and Others: Results From a National-Level Study of College Women*, 30 CRIM. JUST. & BEHAV. 6, 24 (2003).

¹⁴⁷ Bonnie S. Fisher et al., *Reporting Sexual Assault and The Clery Act: Situating Findings from the National Campus Sexual Assault Policy Study Within College Women’s Experiences*, in CAMPUS CRIME: LEGAL, SOCIAL, AND POLICY PERSPECTIVES 65 (Bonnie S. Fisher & John J. Sloan eds., 2007).

¹⁴⁸ For a discussion of surveys and studies measuring the prevalence of rape, see BONNIE S. FISHER, NAT’L CRIM. JUST. REFERENCE SYS., MEASURING RAPE AGAINST WOMEN: THE SIGNIFICANCE OF SURVEY QUESTIONS (2004), available at <https://www.ncjrs.gov/pdffiles1/nij/199705.pdf>.

¹⁴⁹ Or, more accurately, the likelihood that information escrow systems will support reporting increases as the rate of underreporting that *would* be reported via allegation escrow systems rises.

¹⁵⁰ Kimberly T. Schneider, Suzanne Swan & Louise F. Fitzgerald, *Job-Related and Psychological Effects of Sexual Harassment in the Workplace: Empirical Evidence From Two Organizations*, 82 J. APPLIED PSYCHOL. 401, 402 (1997).

¹⁵¹ See, e.g., Beth A. Quinn, *The Paradox of Complaining: Law, Humor, and Harassment in the Everyday Work World*, 25 L. & SOC. INQUIRY 1151 (2000). However, because the experience of sexually harassing behavior is formed in large part by the reactions of the recipient, it is exceedingly difficult if not impossible to identify which of those women who resist the term “harassment” do so for which reasons.

¹⁵² E.g., The Employment Non-Discrimination Act (ENDA). Some version of ENDA has been introduced in nearly every Congress since 1994, and though close at times, has never been enacted. The source of the greatest variation in versions of ENDA, and the greatest obstacle for the legislation so far, has been a debate about

designed to protect gay, lesbian, transgender, and intersex students and employees may prove even more critical than systems aimed primarily at the sexual harassment of women¹⁵³.

Allegation escrows could also easily translate to sensitive employment contexts such as whistleblowing and employee reports to administrative agencies. The robust legal protections provided to whistleblowers¹⁵⁴ are not enough to shield them from potentially serious social and practical consequences of reporting. For example, the Los Angeles Police Department formerly had a practice of assigning whistleblowers to “highway therapy,” whereby he or she would be transferred far from home and colleagues, significantly extending his or her commute.¹⁵⁵ Unofficial retaliation need not be so blatant to effectively deter reports of wrongdoing. Whistleblowers often worry that they will be labeled “troublemakers,” passed over for promotion when more than one equally qualified candidate exists, and suffer social consequences in the workplace.¹⁵⁶ Matched reports of wrongdoing in the workplace would benefit from the credibility enhancing and group-safety functions of allegation escrows. While an escrow would probably not eliminate unofficial retribution, it would make egregious patterns easier to prevent, identify, and prove.

Moreover, directed allegation escrow systems could benefit users any time there is reason to establish a credible record of repeated conduct before making a public complaint. For example, individual citizen oversight complaints of police or other government misconduct may fail to attract attention in the absence of strong community support. What’s more, state authorities have been criticized for making little more than perfunctory investigations of citizen complaints unless and until a pattern of misconduct has been established.¹⁵⁷ Establishing such a pattern presents a problem to complainants, however,

whether transgender individuals should be included in its protection, and whether gender identity issues should be granted the same status as sexual orientation. See Davis M. Herszenhorn, *House Approves Broad Protections for Gay Workers*, N.Y. TIMES, Nov. 8, 2007, at A1 (discussing ENDA’s passage in the House of Representatives in 2007 and summarizing the transgender debate). The version of ENDA that passed the House in 2007 did not include protection for transgendered individuals, and never was brought to a vote in the Senate. LIBRARY OF CONGRESS: THOMAS, *Bill Summary & Status: 110th Congress (2007-2008): H.R. 3685*, <http://thomas.loc.gov/cgi-bin/bdquery/z?d110:h3685>.

¹⁵³ Of course, an early concern with the use of allegation escrow in harassment of or discrimination against students and employees on the basis of sexual orientation and gender identity is the real possibility of an unacceptably high proportion of orphaned complaints. Because relatively few members of an academic or working community will experience such harassment or discrimination, information escrow systems may not attract enough complaints to result in numerous matches. Given the high stakes and lack of robust legal protections, however, its also possible that allegation escrow systems logging such complaints will result in highly impactful and useful, albeit few, group complaints.

¹⁵⁴ E.g., 29 U.S.C. § 660(c) (prohibiting retaliation against employees who complain or testify of violations the Occupational Safety and Health Act); 18 U.S.C. § 1514A (establishing broad protections for whistleblowers complaining of fraud or violations of securities laws); 15 U.S.C. § 2087 (protecting employees from retaliation for reporting violations of safety rules under jurisdiction of Consumer Product Safety Commission). See generally U.S. DEP’T OF LABOR, *eLaws: Employment Law Guide: Other Workplace Standards: Whistleblower and Retaliation Protections*, <http://www.dol.gov/compliance/guide/whistle.htm> (last visited Oct. 2, 2011).

¹⁵⁵ One veteran LAPD officer claimed in 2008 that he’d been demoted and subject to freeway therapy for defending a female colleague after she was harassed and discriminated against on the basis of her gender. In a lawsuit about the retaliation, he described being removed from his K-9 unit and assigned to a division that was a four-hour commute from his home. A Los Angeles jury awarded Bender \$3.6 million in damages, and he agreed to collect \$2.5 million from the city in return for the city’s agreement to forgo appeals. Victoria Kim, *Jury Awards Damages to Officer*, L.A. TIMES, Nov. 13, 2008, at B1.

¹⁵⁶ See generally Janet P. Near & Marcia P. Miceli, *Retaliation Against Whistle Blowers: Predictors and Effects*, 71 J. APPLIED PSYCHOL., 137-145 (1986) (discussing relationship between whistleblowing and retaliation); Marcia A. Parmerlee, Janet P. Near & Tamila C. Jensen, *Correlates of Whistleblowers’ Perceptions of Organizational Retaliation*, 27 ADMIN. SCI. Q. 17-34 (1982) (exploring organizational responses to whistleblowing and identifying factors that increase likelihood of retaliation).

¹⁵⁷ The New York City Civilian Complaint Review Board has a mandate to investigate every complaint received and refers the complaint to the NYPD if found to be substantiated. See NEW YORK CITY CIVILIAN

reputational damage.¹⁶⁵ Patients and physicians are often reluctant to submit voluntary ADE reports because they fear negative repercussions or embarrassment if prescription error or patient non-compliance is blamed.¹⁶⁶ Doctors also avoid ADE out of a desire to protect patient confidentiality.¹⁶⁷

An allegation escrow could lead to greater reporting of ADEs by reducing the risk of embarrassment or negative consequences from direct communication. Despite privacy concerns, patients might choose to participate in order to assure themselves that they have fulfilled their civic duty if the drug is determined to be unsafe. Moreover, as in other allegation escrow contexts, regulators often decline to investigate a drug for safety concerns until a sufficient pattern of events has been established.¹⁶⁸ An allegation escrow system could also take into account individual reports of the severity and type of reactions, addressing the concern that current reporting leads to little continuity when physicians assess the severity of reactions.¹⁶⁹ Nonetheless, ADE escrows would require a significantly higher threshold to trigger the release of allegations, perhaps a level similar to the 10,000 ADEs submitted to the FDA when physicians began to publicize concerns with the controversial diabetes medicine Avandia.¹⁷⁰

In addition to sheer size, an ADE-escrow mechanism would also differ from most of the systems we have discussed thus far by nature of the reports it would collect. ADE reports would require the physicians and patients to disclose patient medical history, the names of innocent third parties, and multiple forms of contact information for all parties. Participants would thus be required to submit information that could be harmful to them in other areas of their lives should it become public, such as a history of medical issues that might concern employers.¹⁷¹ Because ADE submissions are controlled by the Health Insurance Portability

¹⁶⁵ One famous recent example is the diabetes drug Avandia, and other rosiglitazone containing medicines, manufactured by GlaxoSmithKline. Claims that GSK had intentionally hidden evidence that the medicine causes cardiovascular damage in some patients generated virulent public criticism, and ultimately resulted in a congressional hearing addressing both GSK's and the FDA's handling of the matter. For more information on the Avandia scandal, see the STAFF OF S. COMM. ON FINANCE, 111TH CONG., REP. ON GLAXOSMITHKLINE AND THE DIABETES DRUG AVANDIA (Comm. Print 2009); and *FDA's Role in the Evaluation of Avandia's Safety: Hearing Before the H. Comm. on Oversight and Government Reform*, 110th Cong. (2007).

¹⁶⁶ Patient non-compliance, both intentional and unintentional, is exceedingly common and responsible for a non-trivial proportion of ADEs. Prescription error is much less common but by no means unheard of. Drugs with similar sounding names, for example, can lead to prescription errors. U.S. GEN. ACCOUNTING OFFICE, GAO/HEHS-00-21, ADVERSE DRUG EFFECTS: THE MAGNITUDE OF HEALTH RISK IS UNCERTAIN BECAUSE OF LIMITED INCIDENCE DATA (2000) 6-8, available at: <http://www.gao.gov/new.items/he00021.pdf>.

¹⁶⁷ Elena Lopez-Gonzalez, Maria T. Herdeiro & Adolfo Figueiras, *Determinants of Under-Reporting of Adverse Drug Reactions: A Systematic Review*, 32 DRUG SAFETY 28 (2009).

¹⁶⁸ Of course, given the complex medical factors involved, this restraint is a positive aspect of the current system, not a drawback (within reason). As some well-publicized claims that immunizations has led to autism in children illustrate, no matter how convinced an individual reporter may be, medical science does not always agree. E.g., INSTITUTE OF MEDICINE OF THE NATIONAL ACADEMIES, IMMUNIZATION SAFETY REVIEW: VACCINES AND AUTISM (2004) (consensus report of medical experts rejecting causal connection between autism and childhood immunizations).

¹⁶⁹ For more on the disparity of judgments among physicians, see Jeffrey A. Linder, et.al, *Secondary Use of Electronic Health Record Data: Spontaneous Triggered Adverse Drug Event Reporting*, 19 PHARMACOEPIDEMIOLOGY & DRUG SAFETY 1211 (2010).

¹⁷⁰ Based on a search of FDABLE.com, a private, for-profit web site that makes the FDA's ADR database publicly available. Last search conducted August 28, 2011. http://www.fdable.com/advanced_aers_query

¹⁷¹ Given the relatively open ended nature of some questions posed to information escrow participants, all users would be able to submit potentially embarrassing or harmful information (such as having had prior relationships with co-workers). The distinction we make here is that the ADR-escrow would make such a disclosure necessary for participation.

and Accountability Act of 1996 (HIPAA)¹⁷², patients would benefit from legal protections against the use of their medical information outside of the safety-review context, but the potentially serious consequences of an accidental or bad faith breach of confidentiality significantly increases the importance of information security, redaction processes, and anti-hacking measures.¹⁷³ Nonetheless, given the current underreporting of ADEs, an ADE-escrow may ultimately prove worthwhile.

4. Suspicion Escrows

Allegation escrows might also be useful where individuals suspect misconduct on the part of another. For example, mutual friends of a married couple might be aware of one spouse's unfaithfulness, but hesitate to tell the other spouse for fear of having mistakenly construed the situation. This type of situation demonstrates the problem of wrongdoing uncertainty discussed above.¹⁷⁴ An allegation escrow would permit friends to report a suspicion of adultery that would only be forwarded if a triggering number of other suspicion reports were received. Setting the appropriate threshold for forwarding such suspicion reports would seem to present a challenge, but an average of users' estimates of the number of other individuals aware of the misconduct might be the best approach. Moreover, suspicion escrows might benefit from optional reporting anonymity to encourage friends to share their suspicions without the risk of endangering their relationships with either spouse.

A substantial difficulty with suspicion escrows is that the intended beneficiary may not wish to receive the information. Some spouses may prefer ignorance to unproven allegations of adultery. Similar to shared-interest escrows for adoption, suspicion escrows may allow spouses to "opt-in" or "opt-out" of receiving suspicion reports. Moreover, like many adoption regimes, a suspicion escrow system may require opting in by default out of a respect for privacy. A related approach might notify users that the threshold number of reports has been reached, thereby enabling any user to notify the beneficiary that he or she may wish to opt-in and learn of the suspicion. Finally, the harm resulting from collusive or bad-faith suspicions could be substantial. An accused spouse could pursue costly civil suit against bad-faith allegers, but that may be unable to repair the damage to the relationship. As with shared interest escrows, an opt-in approach can minimize this harm by ensuring that spouses voluntarily expose themselves to suspicion information with full knowledge of the risk of bad faith or collusive reports.

B. Shared-Interest Escrows

In addition to our primary example of workplace dating, shared-interest escrow services have a wide range of potential applications. Two particularly intriguing applications are services that could reunite birth parents with their adopted children and systems that aid communication between spouses, couples, or other adults in existing relationships.

¹⁷² For more information on HIPAA and its scope, see U.S. Dep't of Health & Human Serv., *The Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy and Security Rules*, HEALTH INFORMATION PRIVACY <http://www.hhs.gov/ocr/privacy/> (last visited Oct. 3, 2011).

¹⁷³ See *MedWatch Online Voluntary Reporting Form*, U.S. FOOD & DRUG ADMIN., <https://www.accessdata.fda.gov/scripts/medwatch/medwatch-online.htm> (last visited Oct. 3, 2011). Despite the fairly strict HIPAA requirements governing the release of patient information, drug manufacturers are still required to submit some types of ADE reports, and encouraged to submit as many as possible.

¹⁷⁴ See *supra* notes 31 and 32, and accompanying text.

1. Adoption Escrows

Laws governing the disclosure of child adoption records represent one of the most technically intricate and hard-fought areas of family law,¹⁷⁵ which has led states to take different approaches.¹⁷⁶ In general, state laws governing adoption records may be divided into “open” and “closed” systems.¹⁷⁷ In the six states with open systems,¹⁷⁸ an adoptee is entitled to view to his or her original birth certificate (containing the names of his or her biological parents) upon reaching the age of majority.¹⁷⁹ All other states have a “closed” system, under which the adoptee lacks such an entitlement but various statutory and regulatory schemes permit discovering the identity of the biological parent(s) under certain conditions. Thirty states maintain a “mutual consent registry,” essentially a shared-interest escrow, that permits exchanging identifying information upon the mutual consent of the biological parent and adoptee. Twenty-two states presume the biological parent’s non-consent.¹⁸⁰ In these states, identifying information will not be released unless the biological parent files an affidavit in advance affirmatively consenting to disclosure. Eight states presume consent, requiring the parent to file an affidavit to prevent the release of identifying information at the adoptee’s request.¹⁸¹ Finally, the remaining closed states have no formal

¹⁷⁵ See, e.g., Naomi Cahn & Jana Singer, *Adoption, Identity, and the Constitution: The Case for Opening Closed Records*, 2 U. PA. J. CONST. L. 150 (1999) (discussing differences between open and closed adoption regimes and related controversy); AMERICAN ADOPTION CONGRESS, *Reform Adoption Data*, http://www.americanadoptioncongress.org/reform_adoption_data.php (last visited Oct. 2, 2011) (summarizing state-by-state reform of adoption laws to allow adoptees greater access to birth records); BASTARD NATION, <http://www.bastards.org> (last visited Oct. 3, 2011) (organization advocating for right of adoptees to access personal records); Thomas C. Atwood, *Consent or Coercion? How Mandatory Open Records Harm Adoption*, in NAT’L COUNCIL FOR ADOPTION, *ADOPTION FACTBOOK V* (2011) (arguing that “mandatory openness” is “coercive” and harmful to adoption in general). The controversy surrounding “open” or “closed” adoption systems generally assumes that information is sought from state health records. Of course, the parties may agree to mutual disclosure in advance and thereby “open” an adoption regardless of the laws governing the release of information from state records. See, e.g., *Questions About Open Adoption*, OPEN ADOPTION: HELPING OTHERS FOR OVER 20 YEARS, <http://openadoption.com/faq.html> (last visited Oct. 3, 2011) (web site facilitating direct contact between potential adoptive and biological parents).

¹⁷⁶ See, e.g., HAW. REV. STAT. § 578-15(b)(3) (West 2011) (granting adoptee access to identifying information about biological parents for adoptions conducted after Dec. 31, 1990 unless parent(s) filled affirmative request for confidentiality); N.Y. PUB. HEALTH LAW § 4138-c (McKinney 2010) (permitting the release of non-identifying information about biological parents to an adoptee and identifying information upon affirmative consent of the biological family member(s)).

¹⁷⁷ See generally U.S. DEP’T OF HEALTH & HUMAN SERV., ACCESS TO ADOPTION RECORDS: SUMMARY OF STATE LAWS (2009), available at http://www.childwelfare.gov/systemwide/laws_policies/statutes/infoaccessapall.pdf.

¹⁷⁸ See *id.* at 5 (listing “Alabama, Alaska, Maine, Oregon” as allowing adult adoptee access to original birth certificate upon request). Kansas and New Hampshire allow access to birth records as well. KAN. STAT. ANN. § 65-2423 (an adoptee’s original birth certificate “may be opened by the state registrar only upon the demand of the adopted person if of legal age or by an order of court.”); N.H. REV. STAT. ANN. § 5-C:9 (“Upon written application by an adult adoptee, who was born in this state and who has had an original birth certificate removed from vital statistics records due to an adoption, the registrar shall issue to such applicant a non-certified copy of the unaltered, original certificate of birth of the adoptee . . .”).

¹⁷⁹ See, e.g., ALA.CODE 1975 § 22-9A-12(c) (granting adoptee 19-years or older access to original birth certificate).

¹⁸⁰ See U.S. DEP’T OF HEALTH & HUMAN SERV., *supra* note 163, at 4 (“Approximately 30 States have established some form of a mutual consent registry. . . . However, eight States will release information from the registry upon request unless the affected party has filed an affidavit requesting nondisclosure.”).

¹⁸¹ *Id.*

system to exchange information, although eleven permit appointing a “confidential intermediary” to contact biological parent(s) on behalf of an adoptee.¹⁸²

The difference between “presumed consent” and “non-presumed consent” has implications for the design of information escrows in general. For example, as noted previously, suspicion escrows may benefit from requiring a spouse affirmatively to opt-in to receive reports of adultery.¹⁸³ By contrast, two of the escrow regimes mentioned previously—GoodCrush and the “confidential intermediary” system—employ not only presumed consent, but *irrevocable* consent to be contacted, since apparently neither the recipient of a “crush” nor a biological parent can prevent contact, even by filing an affirmative request.¹⁸⁴ Ultimately the appropriate type of presumed or irrevocable (non)consent is context specific, and an early exercise in escrow developer judgment¹⁸⁵.

In open states, an independent escrow might facilitate contact between adoptees and biological parents in a more discrete and privacy-respecting manner than direct, unsolicited contact by the adoptee. Indeed, an escrow could allow the biological parent to indicate in advance that he or she would prefer not to be contacted, thereby preventing the invasion of privacy that might result from even receiving notice that the adoptee would like to establish contact. Similarly, while existing web sites often allow adoptees to contact their biological parents, an independent escrow could facilitate contact in the reverse direction as well. Through the escrow, biological parents could notify adoptees seeking contact of the parents’ willingness to exchange information. Finally, though difficult, shared interest escrows could support connections between adoptees and biological parents in pure “closed” states. Matching would need to occur among adult adoptees only, and would require sufficient information to match on bases other than name, such as date and place of birth. These practical realities might limit the number of successful matches in closed adoption states. The high emotional, medical, and other stakes might nevertheless justify the effort of developing and maintaining the adoption escrow mechanism.

2. Other Relationship Escrows

As we describe above, one of the major advantages of shared-interest escrow in the workplace-dating context is that it can help to avoid long-lasting awkwardness, unnecessarily hurt feelings, or other deleterious effects on the working relationships between co-workers. In fact, we can imagine many circumstances in which adults may wish to share information with one another, but only under unknowable circumstances. A person may wish to propose marriage to her or his partner, for example, but fear the embarrassment or awkwardness that might accompany an already painful rejection. Similarly a spouse may wish to raise a potentially contentious topic with her husband, such as whether to home school the children, but only if she has some indication that he will be receptive to the idea. Couples, swingers, or singles may wish to experiment with new sexual techniques but would prefer not to raise the idea unless the partner is interested as well. Beyond intimate relationships, business

¹⁸² Such a “confidential intermediary,” employed by eleven states, contacts biological parent(s) on behalf of an adoptee to request permission to exchange contact information. *See id.* at 5.

¹⁸³ *See supra* Subsection II.A.4.

¹⁸⁴ “Confidential intermediary” systems amount to a form of mandatory consent, at least to be contacted, since the law does not allow the biological parent to prevent the intermediary from establishing contact. *See, e.g.,* MONT. CODE ANN. § 42-6-104 (providing for the appointment of confidential intermediary without mentioning any right to prevent contact by intermediary in advance).

¹⁸⁵ Developers ought to consider, among other factors, user privacy and the extent to which unexpected or unwanted contact could cause a recipient harm when selecting the default consent. Indeed, presumed consent might be best reserved for those contexts such as Goodcrush.com where harm is unlikely to result from being contacted by the escrow system.

partners may be reluctant to propose new strategies to one another in the absence of some reassurance that the ideas will be well received. Even friends may hesitate to suggest potentially embarrassing hobbies, such as karaoke, unless they know their interest is shared by the other. Shared-interest escrow systems could easily be adapted to help provide such otherwise unattainable assurances.

However, unlike the person seeking a date at work, most relationship-escrow participants will have little way of determining whether the person they hope to address has had the opportunity to express a matching preference. Some escrow participants might conclude that their interest is unreturned, when in fact the other person is simply unaware of the escrow system altogether. On the other hand, some escrow users might interpret a long silence after submitting a first effort to communicate via escrow as a sign not that their interests are unrequited, but that the other person is unaware of or unwilling to use the escrow mechanism.

3. Insecurity Escrows

A variation on shared-interest escrows could ease communication in sensitive group settings. Often delicate questions arise for which one might desire honest feedback from trusted friends and colleagues, but social customs, insecurities, and concerns about awkwardness prevent a forthright conversation. For example, a professor might wonder if his colleagues think its time for him to retire, or if his lectures are boring. On a more personal level, a person might want to ask friends whether his recent weight gain is noticeable, or whether he has bad breath. Often, his friends, for fear of hurt feelings, anger, or awkwardness in the relationship, will offer nothing by means of direct communication but politically correct platitudes or tempered opinions.

One way to gather information ambiguously and indirectly is through anonymous surveys such as Survey Monkey and Google Surveys. While perhaps better than a direct conversation, such web-based and purportedly anonymous surveys also include several drawbacks. A colleague might fear that his responses would be identifiable. For example, if everyone who receives the survey gives the same answer, then the professor would be able to infer that all of his colleagues think it is time for him to retire. The colleague might also worry that if nobody responds, the professor would be able to infer that each colleague failed to respond to the survey request.

An insecurity escrow could minimize these concerns. For example an insecurity escrow might (i) only report a random subset of anonymous responses, and (ii) only report the random subset if a minimum number of responses is received. Thus, if a professor asked 10 colleagues for an opinion, the escrow would only report the anonymous results if at least 5 colleagues responded and only send on 5 responses – choosing 5 at random from the submitted responses. Unlike other shared-interest escrows, an insecurity escrow seeks to fulfill a shared interest while preserving a lack of common knowledge as to respondents' identities and opinions. The triggering threshold ensures that the requesting party could never conclude that no one had responded to his request for information. Similarly, to preserve this ambiguity, respondents would never know whether their feedback was actually forwarded. Finally, the random sampling process would ensure that only a subset of actual responses would be reported to the requesting party. This random subsampling would preserve ambiguity as to whether the results reflect the entire group invited to respond.

4. Undesirable Escrow Systems

While there are seemingly boundless positive applications for information escrows, we can also imagine some shared-interest escrow systems being distorted to serve socially

harmful or deleterious purposes.¹⁸⁶ Perhaps the most obvious and distressing example of a corrupt shared-interest escrow system would be conspiracy escrows that aid, encourage, or contribute to criminal activity. The escrow system would allow users to indirectly communicate interest in working together to commit crimes.¹⁸⁷ Less serious than the extreme example of conspiracy escrows, but also more plausible, the workplace dating application of shared-interest escrow could be subverted to connect people who seek to commit adultery or otherwise engage in clandestine relationships that would harm a third party. The potential adulterer may be very interested in an affair with a friend whom she suspects returns her interest, but unwilling to take even a small risk that rejected direct communication would permanently damage other parts of her life. She might thus welcome the opportunity to find out whether she's correct in her belief that her interest is returned by means of more ambiguous, third-party intermediated communication. An adultery-interest escrow would indeed serve the would-be adulterer's interests fairly well, and would also further the interests of a person interested in having an affair with a married person. Regardless of the outcome for adultery-escrow users, however, many would consider the utility they gain from the system to be outweighed by the costs paid by others.

Finally, it is possible that once the idea of anonymous, intermediated communication becomes familiar in schools and workplaces, follow-on escrow systems with mean-spirited intentions could crop up. For example, one response to a shared-interest escrow system might be a "shared-anti-interest" escrow mechanism. Rather than submitting the names of people in whom an employee is interested, the user might submit the names of his least favorite co-workers, or of the female employees he finds least attractive, or of the boss he dislikes most. Matches that occur would then serve to connect people on the basis of disdain for another person or group of people, potentially causing significant harm to the targeted individuals and disrupting social cohesion. Indeed, some incidents at universities are reminiscent of such an undesirable shared-antipathy escrow.¹⁸⁸ As the harm arising from shared-anti-interest escrows would directly counter the benefits of shared-interest and allegation escrows, escrow developers and clients should take care to ensure that a well intended introduction of intermediated communication does not lead to the introduction of systems that cause more harm than good.

III. IMPLEMENTATION AND DESIGN

Several practical issues with designing information escrows must be addressed, many of which permit more than one viable solution. The best design is ultimately context-driven and difficult to predict on an abstract *ex ante* basis. We nevertheless identify some general design principles that we consider critical to sexual harassment allegation escrow systems, and address several design issues likely to appear across a wide variety of specific escrow systems.

¹⁸⁶ As we discuss above, *supra* Subsection I.B.2., that individual users may abuse an allegation escrow system by submitting false or exaggerated claims is a legitimate concern. These hypothetical poor faith submissions are not an example of a corrupt system, however, but rather one person's misuse of an on the whole beneficial mechanism.

¹⁸⁷ A similar escrow concept is dramatized in the movie, *Strangers on a Train*, where three strangers agree to kill each others' spouse seemingly safe in the knowledge that none will renege on the commitment to silence.

¹⁸⁸ Several notorious incidents at Yale seem to mirror the notion of shared-antipathy escrows. The famous "scouting report" for example, in which men ranked fifty incoming freshman women by the number drinks that a man would need to serve her in order to have sex with her, began anonymously. See Lisa W. Foderaro, *At Yale, Sharper Look at the Treatment of Women*, N.Y. TIMES, Apr. 7, 2011, at A22

A. *Managing Salience*

All information escrow systems depend on sufficient user participation in order to fulfill the objective of lowering first actor barriers to action and assisting communication. Perhaps the worst outcome for an allegation escrow system would be having all or nearly all submissions orphaned, as any complaints that would otherwise have been submitted directly would represent a net loss in the number of official allegations submitted by sexual harassment victims.¹⁸⁹ Maximizing the number of users¹⁹⁰ is thus critical to minimizing the likelihood of an overall negative impact and maximizing the social- and user-utility of information escrows.

Attracting submissions from complainants who would otherwise have remained silent presents two primary obstacles: exposure and user-perceived inertia. The success of an allegation escrow depends on a sufficient number of harassment victims being aware of the system and how to use it. Similarly, it is critical to publicize effectively the confidentiality and other benefits of escrows to potential victims. However, escrow developers may also need to overcome a lack of faith in the system. Many complainants might consider the hassle and emotional strain of submitting an escrowed allegation worthwhile only if there is a reasonable probability that other victims will participate. Users who perceive the escrow to be untried or unpopular may thus neglect to submit an allegation for fear that the system will not generate matches when appropriate. This inertia problem is self-perpetuating. To combat this risk, allegation escrow developers should address the marketing aspect of introducing the new system, as well as the problem of user-confidence inertia.

In our view, the first iterations of allegation escrows should follow the model established by the popular social-networking site Facebook. Facebook's successful rollout strategy began by limiting the site to individual college campuses.¹⁹¹ The site was originally located at Harvard where it was an immediate local sensation.¹⁹² It then moved to other Ivy League schools before being introduced at all U.S. and some non-U.S. universities.¹⁹³ By the time Facebook was introduced to the general public, its popularity and reputation were well established.¹⁹⁴ Following that pattern of success, allegation escrow systems should begin by targeting well-known universities, such as Yale, that are already publicly addressing Title IX, harassment reporting, and other gender-based issues. Having (hopefully) gained some public attention as a result, the allegation escrow system should then be introduced to other universities and educational communities. Finally, if the escrow systems are well received and their utility demonstrated, they should be expanded to groups, communities, and sectors beyond education.

The purpose of a narrowly targeted rollout model is not to achieve or even aspire to the wild popularity of websites like Facebook and Gmail, but to take advantage of the built-in benefits that accompany locally tailored site introductions. Targeting universities for the first wave of allegation escrows reduces the likelihood and severity of institutional resistance. As

¹⁸⁹ As we also mention above, *supra* Subsection I.B.1., we consider such a negative net effect to be unlikely, even if few submissions are successfully matched. As with all areas of research on the under-reporting of sexual harassment, however, there is no way to be entirely certain in such predictions, and as a result we cannot discount the possibility entirely.

¹⁹⁰ To be more precise, developers should seek to maximize the number of escrowed submissions from those harassment victims who would otherwise not submit go-it-alone complaints.

¹⁹¹ Sarah Phillips, *A Brief History of Facebook: Sarah Phillips Reports On the Development of Facebook, From a Harvard Social-Networking Website to a Global Internet Phenomenon*, THE GUARDIAN, Jul. 24, 2007, available at <http://www.guardian.co.uk/technology/2007/jul/25/media.newmedia>.

¹⁹² *Id.*

¹⁹³ *Id.*

¹⁹⁴ *Id.*

we mention above, many universities are already revamping their harassment reporting processes or could benefit from doing so.¹⁹⁵ Large-scale employers, on the other hand, have several legal and practical reasons to resist allegation escrows for as long as possible. More importantly, targeting schools likely to respond positively to allegation escrows mitigates both marketing and inertia concerns. A closed universe of potential complainants and targets makes it easier to inform potential participants about the new escrow system and its benefits. Similarly, a limited population of participants and targets would reassure complainants that any potential matches are almost certainly aware of the escrow system. Finally, beginning at schools that are already addressing Title IX, harassment reporting, and other gender-based issues fosters the recognition, enthusiasm, and energy that can lead to widespread use of allegation escrows.

B. *The Complainant's Allegation Escrow Experience*

The complainant's experience when submitting an allegation lends itself to great flexibility and few general prescriptions. There is a wide range of possible permutations the user experience can reflect, each with advantages and disadvantages for the escrow developer, the complainant, the employer, and the accused.

Ideally, an allegation escrow system should attempt to collect all information that an employer would seek upon learning of a harassment accusation. However, even between seemingly similar companies, there is no typical employer response to a complaint of harassment on the basis of gender or sex.¹⁹⁶ This lack of uniformity contrasts with the relatively standard nature of pre-harassment policies among employers, which seek to prevent harassment and establish a record of reasonable employer efforts should Title VII litigation arise.¹⁹⁷ This lack of consensus complicates the question of what a complainant's allegation submission should include. As always, the details of a complainant's experience when submitting allegations should be flexible and responsive to context-specific needs. We propose the following general guidelines as a starting point for the typical allegation escrow system.¹⁹⁸

At minimum, allegation escrows must collect the information necessary to match submitted allegations accurately and effectively. In a closed universe application,¹⁹⁹ such as a university-specific escrow mechanism, information identifying the alleged harasser might include name, department, job title, and classes taught or taken in a given term. In an employment context, required information might include job title, division, position, supervisor or subordinates, and email address. Moreover, a complainant should be required to provide identifying information to ensure that she is a unique user in good faith. One method of verifying good faith would require the submission of a valid credit card or cell

¹⁹⁵ As we discuss in *supra* Subsection II.A.I, Yale University is currently revamping its sexual harassment reporting processes in response to recent complaints from students and Title IX investigators. As a result Yale and similarly situated schools might be prime candidates for early rollout locations.

¹⁹⁶ Small businesses tend to have unique labor and employment practices that separate them from both larger employers and one another. In addition, small businesses with fewer than fifteen employees are not subject to many of the laws that govern employer conduct. *See, e.g.*, 42 U.S.C. § 2000e. Given the unique nature of such businesses, an acceptable treatment of the topic is beyond the scope of this paper.

¹⁹⁷ *See* Quinn, *supra* note 151 at 1157, Kihnley, *supra* note 82, at 73-74, and Peter W. Dorfman, Anthony T. Cobb & Roxanne Cox, *Investigations Of Sexual Harassment Allegations: Legal Means Fair—Or Does It?*, 39 HUM. RESOURCE MGMT. 33 (2000).

¹⁹⁸ Of course, one of the most basic decisions regarding the design of the complainants experience with the allegation escrow system is the manner in which she submits her complaint. We focus here on what we consider to be the simplest example: internet submissions originating from any computer.

¹⁹⁹ Open-universe allegation escrow systems will require more identifying criteria, but we believe successful and reliable matching is still attainable.

phone matching the complainant's name.²⁰⁰ However, despite its potential advantages, such a process risks excluding the very complainants whose participation the system seeks to encourage. For example, undergraduate students may not own a cell phone or credit card that bears their name. More generally, complainants may be intimidated by the need to submit such personal information. An intermediate approach might require that the complainant supply her student, faculty, or employee ID number.²⁰¹ This would ensure that complainants are unique participants while presenting less of a barrier than credit card or cell phone numbers.

After establishing the complainant's identity and good faith, the escrow system should collect sufficient information about the incident or pattern of behavior that the user believes constitutes sexual harassment. Here the escrow developer must balance the system's and institution's need for specific, semi-standardized information with giving the user sufficient flexibility to fully communicate her concerns. The best approach probably involves a combination of multiple-choice questions, short-answer questions, and one optional essay-style question that provides a catch-all for any information that the user feels has been left unaddressed by the preceding entries.

The multiple-choice questions should elicit specific information required to match allegations, to investigate claims that have been forwarded, or to aggregate public safety data.^{202&203} Ultimately, though there is little consistency in current practice, any questions that an academic administrator, Title IX compliance officer, human resources manager, or EEOC investigator would ask should be included as a multiple-choice question. Short-answer questions should ask the complainant to describe the offensive behavior, her response to that behavior, the timeline of any relevant interactions with the harasser, and the nature and quality of any complaints made thus far. While answers to such questions would probably not be useful in aggregate safety data collection, the contemporaneous submission of detailed information could prove invaluable to claim investigators upon a successful match. Finally, the optional essay-style question should seek to correct any oversights in questionnaire and to allow the user to fully report on her allegations and feel that she has been heard to her satisfaction. Answers to this optional question would be most relevant to investigators addressing matched claims, but may also aid escrow agents in matching close or ambiguous cases.

Throughout the design process, developers should take care to manage complainant expectations and perceptions. Users should be reminded of the gravity of the process and acknowledge that regretted complaints cannot be destroyed. However, care should also be taken to avoid making the process too intimidating, opaque, or difficult. The tone, length, and nature of the questions should encourage good-faith submissions, discourage bad-faith submissions, and support timid users who might be fearful of the complaint process.

²⁰⁰ Credit cards have long been used to confirm identity online, and increasingly cell phones are being employed to confirm that users are real and/or discrete individuals, as opposed to automated programs and/or repeat participants. See, e.g., the current process Google employs when users establish Gmail accounts at www.gmail.com.

²⁰¹ This requirement assumes that the school or employer provides community members with unique numbers that can be matched to their identity, and that the institution is willing to provide the ID database to the allegation escrow system for identification purposes. As with all design aspects, this again requires some context-specific flexibility.

²⁰² Multiple choice questions should also include an 'other' option, with a blank space for individual entry. While this involves a sacrifice with respect to data matching and uniformity, in the allegation escrow context information gathering should be prioritized above standardization.

²⁰³ Even if allegations are orphaned, data such as the location of harassment on campus could be utilized by school security to determine if or how it should adjust its personnel and resource deployment strategy.

C. *The Matching Algorithm*

Nearly all of the value of allegation escrows lies in the algorithm and judgment used to match submitted allegations.²⁰⁴ Escrow developers should thus ensure that the process by which allegations are matched serves its intended purposes. Beyond some requirements basic to all allegation escrow systems²⁰⁵, design in the matching process requires some judgment- and priority-based decisions.

One important decision is whether to subject the content of each submission to any type of review before it is matched with another allegation. Escrow developers may want to screen submitted allegations for assertions of illegal or imminently dangerous activity, and then forward flagged content to the police or other appropriate authority. We view pre-matching content screening as contrary to the goals and claims of the escrow system, and thus prefer a black-box approach to submitted allegations. The risk of delaying review until matching, however, is that ostensibly avoidable harms may occur. Given the potential consequences to user privacy, user well-being, and system integrity, escrow system developers should be conscious of their normative preferences when choosing their pre-match procedure.

Another decision is whether to allow matching on the basis of group identity, such as conduct by an entire department. Allowing group-based matching complicates any allegation escrow mechanism, but may be necessary to establish patterns of conduct for a proper investigation. However, group-based matching may require an increased level of participation by an escrow system agent, thereby introducing labor costs and the possibility of human error. Escrow developers would also have to decide whether to infer a group complaint from an individual complaint. For example, six complaints each identifying a different faculty member in the math department could be forwarded as an anonymous group-based complaint. Finally, group-based matching would also probably require a separate and difficult-to-define²⁰⁶ triggering threshold required for forwarding to officials and authorities.

All allegation escrow systems should involve an individual, judgment-based “reality check” before forwarding matches to school, employer, or government authorities. Such a “reality check” should address two fundamental questions: first, are all of the matched complaints from discrete users, submitted in good faith and subject-matter appropriate? Second, are the allegations of similar enough severity to warrant forwarding?

Of the two review questions, the review for discrete, good-faith complaints is fairly straightforward, though not error-proof. The escrow agent should confirm that questions identifying the complainant have been answered in a satisfactory way. The agent should also compare all of the matched allegations to ensure that they appear to come from unique users

²⁰⁴ The other main source of value added is, for those systems that collect it, in the aggregated public safety data that can be collected from even those allegations that are ultimately orphaned. Schools may be able to alter the deployment schedule and pattern of their security employees, for example, in response to aggregate data from orphaned complaints.

²⁰⁵ Some of the requirements basic to all allegation escrow systems include matching allegations when one of the complainants has misspelled the harasser’s name, or when complainants referring to the same harasser have selected different answers to one of the identifying multiple choice questions, as in the case of a faculty member with a joint appointment in more than one department, or an employee who has changed divisions. These issues are best solved with careful programming, however, and as such we do not address them here.

²⁰⁶ This difficulty results from differing group characteristics: should the large history department be subject to the same threshold as the tiny Classics department? Should sports teams and student organizations be subject to a threshold applied to faculty? While selecting a blanket group-threshold would be difficult and perhaps ultimately unfair, so too would pre-defining appropriate threshold for all possible groups. Group matching might, however, be a realistic goal for subsequent iterations of allegation escrow systems that can benefit from early experiences at a given institution.

and do not bear too many similarities. The reviewer might look at each complaint separately to determine if the allegations are credible enough to warrant official submission.²⁰⁷ Perhaps even more than direct complaints, allegation escrows can be abused and subverted for harassing purposes. Escrow reviewers should endeavor to prevent matched complaints resulting from one spiteful person, or a colluding group of spiteful people, that can negatively impact an innocent accused's career, reputation, or personal life. Though the potential public embarrassment associated with submitting false or defamatory claims will probably bar many bad faith claims, escrow agents ought to take care to ensure that the system does not foster significantly more harm to innocent parties than would occur in the absence of the escrow mechanism. Finally, this first-stage review should ensure that the allegation actually asserts harassment and not other, off-topic conduct.²⁰⁸

Perhaps the most difficult challenge for the escrow agent reviewing matched allegations is ensuring that the allegations are similar enough to warrant forwarding. In the university context, for example, an allegation of a faculty member requesting sexual favors on threat of grade retaliation is fundamentally different from a complaint that describes the same faculty member's pattern of making inappropriate jokes in lecture. Both complaints are entirely valid and legitimate, but describe behavior of vastly different severity. Many escrow systems may treat the two claims as different enough that they fail to trigger a forwarded match, for fear that the complainant alleging the more serious conduct would essentially be placed in a position very similar to the one she avoided by refusing to submit a go it alone complaint.²⁰⁹ The difficulty in making this judgment is determining where to draw the line between matched allegations that are similar enough to trigger official reporting and those that are not. Inevitably, many of the matched allegations will present close calls, significantly complicating the review process.²¹⁰

The consequences of delaying matched allegations are potentially significant. At minimum, a screener's choice to treat two matched allegations as fundamentally different increases the risk that both allegations will be functionally orphaned. In addition, because this dilemma implies that one of the complaints alleges serious harassment, even a short delay in forwarding matched allegations exposes the complainants and others to the risk of continued harm. On the other hand, the screener must assume that but for the option of waiting for a sufficient match, the complainant would have chosen to remain silent. To the extent that officially submitting two vastly different claims is effectively forces the users to go-it-alone, forwarding poorly matched allegations subverts the aims of the allegation escrow system and directly harms complainants. Ultimately, the screener should decide whether to err on the side of over- or under-reporting of matched allegations, and then accept

²⁰⁷ Within reason this content-based review should probably screen out only the most outrageous sounding claims. Particularly if the complainant's identity has been clearly established, the threat of public exposure of having made a false claim should restrain many users. Also, because by definition the reviewer cannot anticipate the range of behavior that might lead to a harassment complaint, an unnecessarily aggressive screening approach might risk failing to forward the most egregious and attention-deserving allegations.

²⁰⁸ We suggest deleting off-topic allegations without notice to anyone because the alternative either requires pre-match content screening, or risks that upon an identity-based match, the complainant who submitted the first, off topic allegation will essentially be notified that another user has submitted a complaint about the same target. This would risk the privacy of the second complainant, as well as jeopardize the integrity of the escrow system by incentivizing poor faith, follow-on claims.

²⁰⁹ Of course, some escrow system developers might forward any matched, good faith allegations. Such a decision would simplify the review process significantly, and lower the risk of unnecessarily orphaned claims. At worst, however, it could also lead to go-it-alone style harms for some users, thus negating the purpose of the system as a whole. A pattern of such harms might ultimately also have a chilling effect on submissions.

²¹⁰ Of particular relevance in this decision making process would be the screener's guess as to the preferences of the complainant submitting the more serious allegation.

that some controversial or regrettable decisions are inevitable.²¹¹

The final judgment-based decision is how to forward complaints to school, employer, or government officials. Many institutions offer a range of methods to report harassment, from informal grievance processes to official complaints requiring trial-like hearings. Screeners might begin with the least formal submission process and monitor and resubmit it if necessary, or simply choose the method they consider most appropriate based on the severity of the matched allegations. While the best practice depends on context-dependent factors, the escrow system should generally aim to be as simple as possible, suggesting that the screener choose a submission method based on the nature of the claims alone.

III. CONCLUSION

This article has tried to do three things. First, in providing a meta-theory for information escrows, we have tried to reveal relationships between a wide array of existing practices (and even a number of patents). Seen through the lens of information escrows, one can see connections among the disparate practices of everything from cybersettle and criminal expungements to adoption consent registries and even Goodcrush.com. In each of these contexts, private information is deposited with an escrow agent who is only to pass on the information under pre-specified conditions.

Second, we have tried to suggest other contexts where information escrows might provide value. In addition to explaining existing practice, we have tried to show that a better understanding of information escrows can help generate new areas where they might be beneficially deployed. We have suggested a dizzying array of possibilities – including insecurity escrows, shared-interest interest escrows, suspicion escrows, and even anti-interest escrows, as well as highlighting a number of cross-cutting design choices – including, for example, presumed consent, and interim reporting – which give greater flexibility in managing the potentially disrupted impacts of common knowledge.

Third, we have gone beyond a cataloging of mere possibilities to provide sustained arguments for deploying sexual harassment complaint escrows and workplace dating escrows. Our theory provides no a priori arguments in favor of escrows, but our theory does suggest conditions when intermediated communication by escrow agents can produce socially enhanced equilibria. Both of our core applications hold the promise of improving work place or school environments. Sexual harassment complaint escrows might alleviate the currently significant under-reporting problem and trigger more investigations with more credible evidence. Workplace dating escrows might facilitate the discovery of shared interest while simultaneously reducing the discomfort associated with unrequited interest. Together these applications of what in some ways is a very old idea might play a role in improving the quality of life in our places of work.

²¹¹ As with information security, here too independence from the sponsoring institution and its liability generating responsibilities becomes important.