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How This Online Site for College Sexual Assault Reporting Extends Value Design

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Abstract

In this paper, we offer a case study of Callisto, an online site for sexual assault reporting, to highlight innovations in value design. We compare Callisto first to ordinary reporting systems, second to value design projects in computer/information system engineering, and third to large scale social movements and social media enterprises. Callisto stands out from other systems based on its exceptional value agency- a measure of a system's societal reach, resource commitment, and value design engineering. As such, it provides a model for human rights and social justice campaigns.

Keywords: sexual assault reporting, social justice, Participatory Design, Persuasive Design, Value Sensitive Design, Value in Design, value agency

Callisto As a Value Agent: How This Online Site for College Sexual Assault Reporting Extends Value Design

With advances in internet and social media connectivity we have witnessed significant transformations in entire industries such as publishing, telecommunication, entertainment, and advertising/marketing. We also are beginning to see interesting developments in philanthropy and social movements. In this paper, we offer a case study of Callisto, an online site for sexual assault reporting, to highlight innovations in the latter domain. We compare Callisto first to ordinary reporting systems, second to value design projects in computer/information system engineering, and third to large scale social movements and social media enterprises. We differentiate Callisto from other systems based on value agency (a measure of a system's societal reach, resource commitment, and value design engineering) and we highlight its dual mission of empowering survivors and promoting social justice.

Callisto

Callisto is a third party reporting service created by Sexual Health Innovations, designed to support students who have experienced sexual violence. To date it is operational on four campuses in the United States. Using the program, students create an encrypted, time stamped record of their assault which is then further passcode protected. They are then prompted to create a record of the assault which allows them to save details of the assault for later reporting if desired. These prompts include 16 optional questions organized into 4 sections, "when, where, what, who." Students can then use the program to directly report to the school (generally to the Title IX officer) or they have the option of "matching" in which their report is only submitted to the university if another student names the same perpetrator. Survivors¹ may also choose not to report at all and use the program to save a record which remains private unless they later decide to report. These three features (record, report, match) speak directly to several realities of campus sexual violence, including the typical delay in reporting (thus the time stamped report of the assault), the issue of non-reporting (less than 10% of survivors will report their assault), and the prevalence of repeat perpetrators (up to 90% of assaults are committed by repeat offenders) (Project Callisto, 2016).

The program also provides extensive information on the reporting process, including options outside of Callisto. There is information for instance on how to report directly to the university, reporting to the police, or creating an anonymous report. They likewise identify relevant staff and offices on campus in addition to relevant emotional, medical, legal and policy resources. Callisto aims to prevent sexual violence by halting repeat offenders, work with institutions to increase reporting, improve the accuracy of those reports, build student trust and protect confidentiality. According to the website, to date Callisto has been adopted by University of San Francisco, Pomona College, Central College, and Coe College and the administrators are looking to expand to other universities (Project Callisto, 2016).

¹ The use of the term survivor is consistent with Callisto's language. While we use both in the paper, we use survivor as a general term and victim in relation to criminal justice proceedings, reporting and adjudications (this is to recognize the survivor as a victim of a crime).

Campus Sexual Violence in the United States

One in five women and one in sixteen men are sexually assaulted during their time in college (Krebs, Lindquist, Warner, Fisher, & Martin, 2007) and less than 5% of victims on college campuses report their assaults to law enforcement (these rates can vary from 0% to 12% depending on type of assault) (see generally Sabina & Ho (2014)). There are various barriers to reporting including; not wanting others to find out about the assault, lack of proof, fear of retaliation, fear of being treated badly by the police or a belief that the police would view the incident as not serious (Fisher, Cullen, & Turner, 2000). Previous research has found that victims may also experience “secondary victimization” when reporting “defined as the victim-blaming attitudes, behaviors, and practices engaged in by community services providers, which result in additional trauma for rape survivors” (Campbell, 2005). While many victims do not report through formal channels, most do disclose to family and/or friends (Fisher et al., 2000; Sylaska & Edwards, 2013). Rates of reporting to police are likewise affected by type of assault, for instance, rates of reporting are significantly lower when the assault involves substances (i.e. victim is incapacitated) when compared to “forced sexual assault” (Kilpatrick, Resnick, Ruggiero, Conoscenti, & McCauley, 2007; Krebs et al., 2007). Rates of reporting through formal campus channels are likewise low and victims are more likely to contact off campus services than on campus services, for instance a victim crisis center (Krebs et al., 2007).

The vast majority of sexual assaults are committed by known perpetrators (80%), this is also true for campus assaults. In both attempted and completed campus rapes, 9 out of 10 offenders were known to the victim, and the majority of victimizations take place in students’ living quarters. Off-campus victimization is more common than on campus, although many of these victims may be “engaged in an activity that is connected to her life as a student,” i.e. bars, nightclubs, off campus student housing (Fisher et al., 2000, p. 19).

In recent years, there has been a marked shift in discussions of campus sexual assault from “no means no” to “yes means yes.” While California was the first state to mandate affirmative consent for all of its colleges and universities (California S.B. 967, 2014), many universities have moved in this direction incorporating affirmative consent into their sexual assault policies (Tuerkheimer, 2015). Such language was also strengthened by the Obama administration’s involvement in discussions and mandates of campus sexual violence, for instance, in “Not Alone: The First Report of the White House Task Force to Protect Students from Sexual Assault,” the following definition of consent is suggested for school’s sexual misconduct policy:

“Consent” must be informed, voluntary, and mutual, and can be withdrawn at any time. There is no consent when there is force, expressed or implied, or when coercion, intimidation, threats, or duress is used. Whether a person has taken advantage of a position of influence over another person may be a factor in determining consent. Silence or absence of resistance does not imply consent. Past consent to sexual activity with another person does not imply ongoing future consent with that person or consent to that same sexual activity with another person (White House, 2014).

Such language however has been largely absent from criminal law (Tuerkheimer, 2015).

Rates of campus sexual violence do not seem to be increasing, however, universities are being increasingly held accountable for their responses by survivors and the Office for Civil Rights (OCR). While many disagree on how to actually address the problem, there is widespread consensus among activists and researchers that universities have not been meeting their moral, ethical, and legal responsibilities in addressing sexual violence and protecting survivors. The expanding work on institutional betrayal "... a description of individual experiences of violations of trust and dependency perpetrated against any member of an institution in a way that does not necessarily arise from an individual's less-privileged identity" (Smith & Freyd, 2014, p. 577) elaborates on the pervasiveness of this institutional misconduct. Critics of universities in these cases suggest that universities are at times prioritizing their public image, fundraising, and prominent sports programs over the protection of victims. In one of these tragic cases for instance, Lizzy Seeberg, a student at St. Mary's College, reported being sexually assaulted by a male acquaintance in a dormitory at the University of Notre Dame. The male student was a football player there and because the assault occurred on Notre Dame's campus, she reported the assault to their campus police. In the days following she received harassing text messages from other football players, while campus police interviewed witnesses and Lizzy several times. They did not actually interview the accused until 2 weeks after the report. Lizzy committed suicide 10 days after she filed the report (Smith & Freyd, 2014).

Organized and well publicized activism on college campuses has fundamentally changed the discourse and there are currently 260 colleges and universities with open Title IX investigations for potentially mishandling reports of sexual violence. The Chronicle of Higher Education (2016) has even developed an online tracking system in which users can search open investigations by college or keyword. Organizations such as "Know your IX," provide resources to students looking to address sexual violence on their campuses, open a title IX lawsuit/investigation, or access other resources in the aftermath of sexual violence. The federal government has also been central to this conversation. Both the "Dear Colleague" letter in April, 2011 and the document "Questions and Answers on Title IX and Sexual Violence" have laid out in detail expanded expectations for colleges and universities in handling sexual violence. In 2013 Congress passed the Campus Sexual Violence Act (CSVA) which "increases transparency on campus about incidents of sexual violence, guarantees victims enhanced rights, sets standards for disciplinary proceedings, and requires campus-wide prevention education programs" (Know Your IX, 2016). In many cases, under these new recommendations, schools are substantially revising their investigation and hearing processes, sexual assault policies and the accessibility of them.

Callisto in Comparison to Mandated Reporting Systems

While there has been significant variation in reporting procedures across universities, under Title IX, The Campus Save Act (Campus SAVE Act, n.d.) and related U.S. federal policies, universities are required to establish minimum standards and procedures in the reporting of and response to sexual violence. The Office of Civil Rights (OCR) requires all reports of sexual assault to be investigated by the Title IX office (or a Title IX representative). They likewise require universities to publish their sexual misconduct policies including, reporting, investigation, and adjudication. Across universities reporting

can happen in various ways, one such example being a disclosure to someone who is deemed a “responsible employee,” defined as: “any employee who has right to take action to redress sexual violence; who has been given the duty of reporting incidents of sexual violence or any other misconduct by students to the Title IX coordinator or other appropriate school designee; or whom a student could reasonably believe has this authority or duty” (U.S. Department of Education, 2016, p. 15). This policy in effect turns all “responsible employees” into mandated reporters. This differentiates such employees from professional counselors or pastoral staff who are actually confidential.

The Office of Civil Rights and the Whitehouse have moreover encouraged campuses to use best practices; the previously mentioned 2014 Whitehouse report, “Not Alone,” for instance included a “sample reporting and confidentiality protocol” for sexual assault survivors that “make students aware of the various reporting and confidential disclosure options available to them – so they can make informed choices about where to turn should they become a victim of sexual violence” (Whitehouse, 2014, p. 2). Related to this, OCR has encouraged universities to offer online anonymous and/or confidential reporting options, however, this is not currently required. While it is difficult to know what percentage of campuses are providing these tools, it is not uncommon. Such tools include online forms or a specific app/program which may or may not be designed specifically for the reporting of sexual violence. Our University for instance uses the Silent Witness Program, “which provides a campus wide communication method for anyone to provide “anonymous information” by reporting matters of improper conduct, behavioral anti-social acts and general safety or security concerns” (Sacred Heart University, 2017).

Callisto is a product of the increased effort to address campus sexual violence and it entails the best practices recommended by the OCR and 2014 Whitehouse report. In particular, it is online accessible, user friendly, informative, and includes anonymous and/or confidential reporting options. The “match” feature, which is perhaps the most unique feature of the program, is designed to not only empower survivors to come forward, but ideally prevent future assaults by identifying repeat offenders early in the process. For example, in a recent TED talk, Jessica Ladd, one of the creators of the site, uses the assault of a young woman named “Hannah” to illustrate what she describes as the sexual reporting system that survivors want:

She heads to a campus party where she sees a guy that she has a crush on. Let's call him Mike. The next day, Hannah wakes up with a pounding headache. She can only remember the night in flashes. But what she does remember is throwing up in the hall outside Mike's room and staring at the wall silently while he was inside her, wanting it to stop, then shakily stumbling home. She doesn't feel good about what happened, but she thinks, “Maybe this is just what sex in college is?” (Ladd, 2016)

Initially Hannah wants to deal with the assault on her own, but after graduation she learns that she was one of five women who Mike sexually assaulted. Ladd suggests that in this particular case, Callisto’s matching feature would have enabled Hannah to identify Mike as a repeat offender much earlier, thus being more likely to report to the university, and perhaps even preventing future sexual assaults. This match feature requires students to provide a “unique identifier” for the perpetrator, which is their Facebook URL. When the program identifies a

match, triggered by two identifications of the same Facebook URL, the victim's name and contact information, and the perpetrator's name and identifier is sent to the university.

Callisto creators suggest that given the high proportion of repeat offenders, this unique matching feature could prevent as much as 60% of campus sexual violence. The system is based on information escrows in which information is stored and only passed along if certain conditions are met (i.e. the perpetrator's unique Facebook URL is linked to at least twice). This information escrow model has the potential then of mitigating the "first mover disadvantage," that is, the daunting prospect of facing alone the ordeal of making a public accusation. 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 by at least one other allegation against the same individual (Ayres & Unkovic, 2102).

There are obvious complications as well, first, both victims must opt into matching for the system to trigger the report, which requires them to consent to have their contact information and report shared with the Title IX officer; there is no anonymous reporting option. The program does however link out to anonymous reporting options that the university may also host.

Interests and Values

Ordinarily, computer and information systems are understood and assessed in terms of utility--technical and economic. Systems should work in a manner that increases the functionality of the enterprise. Also measured is cost effectiveness. This is not cavalier, rather it is driven by professional and financial interests. Value enters as these systems are developed and deployed, but the "value added" in this economic perspective has to do with performance and investment gains. Callisto, in contrast, was developed and operates for nonprofit interests. It is primarily dedicated to personal well-being and flourishing communities. Callisto's added values, as soon will be discussed, are self-empowerment and social justice. They have been built into the system. Computer scientists and ethicists are key innovators in value design, for example with Participatory Design, Persuasive Design, Value Sensitive Design and Value in Design. We will describe how Callisto follows value design principles as we highlight its capabilities. However, before doing that we must lay some groundwork by presenting a science and technology studies and value design perspective on the relationship between technology and values.

Avoiding the Double Bind

Often in the case when a technology is impugned for being antithetical to human interests and values, opponents counter that technology is blameless and only people are at fault. Disagreement over this sometimes enters public debate, for example, in the case of semi-automatic rifles, mass killings, and the claim that "guns kill" and the counterclaim that "guns don't kill; people do." Does technology hold values or is it value neutral? If we pose the question about technology and values this way we run into two conceptual binds. First, we must accept the premise that by their very nature artifacts either completely commit to a value or are completely naive — value loaded or value free. Second, we are compelled to divide and keep

conceptually separate tool and user, technology and social. Soon we reach impasses which severely curtail our ability to understand new phenomenon such as Callisto.

We avoid the first bind by asserting that the all-or-nothing premise is a false dichotomy. Why must it be diametric? Winner (1980), for instance, describes the “valence” of a technology as a tendency in form and function toward an ethical affect. Most people would agree that a water pistol and assault rifle have different design and performance features in accordance with a lower and higher potential for lethality. This does not mean that the assault rifle must always and everywhere be lethal. While on display in an exhibit it will not be. It simply means that under various conditions it is more likely to be lethal, as news reports too often confirm. Winner’s concept of valence avoids coarse technological determinism but also denies the claim of value neutrality. It shifts focus to the probability that values are realized or threatened.

The second bind occurs when conceptually isolating components of a complex set of interrelationships, for example, taking a firearm culture/economy and imagining guns on the one side and people on the other. The technological and social are treated as mutually exclusive. We take a different approach most evident in science and technology studies by emphasizing mutual influence and complex interaction. Winner sees the social coursing through artefacts as it shapes their valence. Latour (1992), among others, notes that many artifacts in turn are crucial to social order. They close doors (pneumatic hinge), promote traffic flow (stop signs and lights) and serve seatbelt legislation (caution chimes or lights). Alter them and you alter society. Pinch and Bijker (1984) emphasize the intersection or mix of the social and technological. Rather than isolate and contrast, they encourage us to see sociotechnical ensembles. For instance, what makes the USA rates of gun violence so atypical of affluent nations is the ensemble of lax background checks, easy firearm access, social strife, political might of the National Rifle Association, violent imagery in cinema and gaming, and the high-powered weapons with large capacity magazines.

Even though Callisto is referred to as a technology, this surely oversimplifies. It is a coordinated ensemble of servers, advisory boards, social networks, programming code, counselors, etc. Understood as a sociotechnical ensemble we are better able to identify and evaluate interesting design features.

Participatory Design

At its most basic, Participatory Design is the involvement of end users in the design and development of systems (see for instance Bjerknes and Bratteteig, 1995 and Schuler and Namioka, 2009). The purpose, however, is not simply to help ensure that users are comfortable with products. More importantly, participation makes the creative process more egalitarian when the interests and values of non-experts are included. For example, in a manufacturing setting, line workers participate in product design. Scandinavian countries were the first to push for this with the intent to incorporate democratic principles into the industrial sector. Social stratification diminishes if designers, workers, and users share the power inherent in production and when formal expertise and practical knowledge are also shared.

Callisto primarily demonstrates Participatory Design by inclusion of sexual assault survivors in the creation of the reporting system. According to the website, “The foundation of Callisto draws

from research conducted with 100+ college sexual assault survivors. Stakeholders are engaged throughout project ideation, design, and development.” They conduct focus groups and surveys on the campuses they serve to likewise get feedback from those using the program. Under a heading of Inclusivity and Diversity, the organization further states that, “We recognize that every individual's experience of sexual violence is unique and all experiences are valid. We aim to engage as diverse a group as possible to ensure Callisto offers an inclusive and welcoming experience for all” (Project Callisto, 2016). Callisto has three advisory boards identified as Technology, Higher Education, and Community. Of the latter, individuals are affiliated with the following groups: Know Your IX, End Rape On Campus (EROC), Futures Without Violence, Faculty Against Rape, Hollaback, National Sexual Violence Resource Center (NSVRC), and Surviving in Numbers. Finally, the code for the online reporting system is open source.

After speaking with a Callisto representative, we learned that the matching feature which requires the inclusion of the perpetrator’s Facebook URL was part of their survivor- centered practice. Callisto consistently conducts research with survivors to build a victim informed response system. According to this research, linking to a Facebook URL felt like the least “traumatic” sharing of information. For instance, finding an accurate email address, phone number, etc., seems to require more involvement from the survivor as this information is not as easily accessible.

Persuasive Design

Persuasive Design is inspired by Fogg’s (2003) argument that it is appropriate to design computer or information systems to influence users’ attitudes and behaviors providing these systems are not coercive or manipulative. A system may guide and reward users toward particular ends albeit with sufficient openness for user choice and self-determination. Some system abilities relevant to Callisto include “making target behavior easier to do,” “leading people through a process,” helping people rehearse a behavior,” “modelling a target behavior or attitude,” and “providing social support” (Gram-Hansen & Gram-Hansen, 2013). Callisto’s target behavior is reporting sexual assault. It is designed to make that process easier by providing, for instance, a low stakes entry point in which a person may establish a private, encrypted, and anonymous record of an incident of unwanted sexual contact or assault. A series of prompts guide users to provide important information.

When assault survivors engage with Callisto they are encouraged to seek support and to do more. They are likely to encounter testimonials that stress the importance of support services and reporting options:

I was raped during the first week of my freshman year, and I can't even count the number of people I know who have been sexually assaulted during their college career. I wish there would've been more education about sexual assault in general as well as reporting options and support services. –Anonymous survivor

A number of my friends experienced sexual assault when they were in school. Reporting it to the appropriate authorities was tremendously challenging and they almost always waited too long due to a number of fears. A tool like this could provide tremendous benefit to people like them. - Male, 29 (Project Callisto, 2016)

Survivors are also encouraged to think in terms of how they might contribute to prevention. On Callisto's main web page, the low rate of reporting in the USA is problematic in that few assailants are being identified and that repeat offenders commit 90% of sexual assaults. "We could prevent 59% of assaults from ever occurring - just by halting repeat offenders earlier on" (Project Callisto, 2016). The matching system is a specifically designed opt-in choice described as an important aid in identifying repeat offenders. Matching also entails a further commitment toward reporting.

In the spirit of Persuasive Design, Callisto strives for a balance between fulfilling its mission of increasing reporting/prevention and respecting participants' autonomy. The latter is particularly important given survivors' experience. In unwanted sexual contact or an assault, a person suffers denial of free will. Callisto was designed with the survivor in mind providing a context and experience that would, in contrast, be based on empowerment. This is evident in the full disclosure of how Callisto is structured and how reporting is done. The informational video provided through the main web page (transcript excerpt below) emphasizes that survivors voluntarily participate and that they decide whether to report and in what manner: "Whether you choose to report to your school, opt into the matching system, or just want to save more information yourself, or learn more, is up to you. Callisto can help you stay in control of your own process. Let Callisto help you make an informed decision that's right for you" (Project Callisto, 2016).

Value Sensitive Design and Value in Design

Value Sensitive Design (VSD) (see for instance Batya, Kahn, Jr. and Borning, (2008)) and Value in Design (VID) (see for instance Nissenbaum and Gaboury, (2016)) are projects founded on the premise that values are expressed in technological designs. Investigators study ways systems do or do not promote privacy, trust, freedom and other values, and these findings serve to guide design and deployment. For example, based on the work of Jonathan Belman, Mary Flanagan, and Helen Nissenbaum, the Values At Play program supports game designers' efforts to foster children's play in ways that encourage inclusivity and gender equity, altruism, and other human values (Values At Play, 2017). UrbanSim (2017) utilizes VSD in the design of its urban development simulation system to be responsive to stakeholder values including equity, sustainability, and environmental protection but also economic expansion or property rights. This latter example suggests that value design is often complicated by competing values. Moreover, tradeoffs sometimes are made between the promotion of values and engineering requirements or product success. VSD and VID emphasize the importance of acknowledging and studying these practical realities.

Because it is nonprofit with generous funders, Callisto has an advantage over commercial enterprises in realizing its core values in design. Nevertheless, it is not without tensions. As mentioned earlier, Callisto institutes its commitment to survivor empowerment through its survivor-centered practice. Empowerment entails autonomy and self-determination, and in the context of sexual assault victimization, this means regaining one's personal and social vitality. Callisto facilitates this in a few ways. It provides a supportive environment for survivors to act, whether that be gathering information, seeking support services, generating a record, matching,

or directly reporting. In contrast, traditional reporting systems may seem daunting to survivors or even hostile. Additionally, as a well-designed site accessible via digital devices and social media, Callisto appeals to young adults comfortable online. Moreover, it encourages survivors to be proactive by framing this as a service to others. With all that said, it is important to note survivors' vulnerability. Callisto may empower users and their reporting but it does not directly influence what happens to them beyond that stage. Even within Callisto it can be difficult and painful to report, for example, to identify a perpetrator by posting the URL of an assailant's Facebook page.

Confidentiality and privacy are respected within certain domains of Callisto but are not end values. They are upheld in record creation but are waived when making an official report to school and legal authorities. Matching falls somewhere in between, dependent upon whether the assailant is also identified in another person's record. Consistent with empowerment, the user decides whether to retain anonymity and privacy or give up for the sake of reporting.

Given the emphasis on values associated with personal well-being it might seem surprising that Callisto's motto is "Technological Solutions for Transformative Social Change." This suggests another dimension of Callisto's value commitment, one that follows from the mission of its parent organization, Sexual Health Innovations (SHI):

Every year, sexual health and wellbeing issues impact millions of Americans. These issues include sexually transmitted infections, sexual assault, lack of sexual pleasure, negative self-conception, and unintended pregnancy. Sexual health and wellbeing issues especially affect populations with less political power and financial resources, such as youth, racial and gender minorities, women, and GLBTQ communities. Their lack of influence, combined with the stigmatization of sexual health topics, makes it hard for them to access high-quality sexual health education, services, and support. Technology has enormous potential to provide this access conveniently and at a fraction of the cost of traditional solutions, empowering those most in need to take informed action (Sexual Health Innovations, 2016)

SHI asserts a positive social right of access to sexual health and wellbeing education, services, and support. Moreover, lack of access for individuals is framed by a social epidemiological perspective as a matter of social stratification and social discrimination. Empowerment is once again stressed but also evident is an appeal to the values of equity and social justice. These values are not at odds. We find pronounced in SHI and Callisto's holistic approach a dual sensitivity reflecting C. Wright Mills' sociological imagination that sees personal troubles in light of public issues: "Callisto doesn't just have a positive influence on the end user - it impacts entire campus communities and has the potential to be truly disruptive of the sexual assault epidemic" (Project Callisto, 2016).

Value Agency

Jessica Ladd suggests that it was her experience as a survivor of sexual violence in college that led to the formation of Callisto. Ladd, an epidemiologist and sexual health activist, already had

an influential role in using digital systems to address issues of sexual health and well-being. As one of the creators of SHI she was central to the development of “So They Can Know,” an online notification system for STDs. “I was thinking through my own experience in college,” Ladd recalls, “trying to figure out what type of technology would have been helpful to me.” Prevention felt like too complex a problem: “I have no idea how or if anything, particularly technology related, could have prevented me from being assaulted,” she admits (Wheeling, 2016). Fixing the reporting process felt like an easier problem to solve. Furthermore, as activists, Ladd and others did more than a technical fix. They built a multi-dimensional organization that combined web design with outreach to school administrators, public officials, and researchers on behalf of victims/survivors. This is what we find so intriguing- that the founders envisioned Callisto not simply to be a design system facilitating values, but also an active player in the social world. Callisto’s Get Involved web page emphasizes this: “Join a global movement to combat rape culture and support survivors” (Project Callisto, 2016).

We use the term “value agency” to denote the full breadth and commitment to the socio-technical promotion of values, as exemplified not only by Callisto’s design but also by its activism. Of the possible dimensions of value agency, we take into account: 1) societal reach, 2) value commitment, and 3) value design. By “societal reach” we have in mind the enterprise scale and whether its operation influences a small or large set of groups and organizations. “Value commitment” refers to the extent an enterprise commits its resources—capital, labor, reputation, etc., directly for the promotion of human values. With “value design” we simply note the extent to which enterprises engage in this practice as described in this paper. In the remaining part of the paper we will describe Callisto’s value agency through comparison to context-specific value design, as well as, social movement organizations (SMOs) and social media such as Facebook.

Societal Reach

Ordinarily, but not exclusively, value design projects are modest in scope and are designed for a specific context such as a workplace or classroom. To a large extent this is pragmatic. From an engineering or developer perspective having a manageable environment is crucial for deployment and testing. The wider world is a wilder world and much harder to keep tabs on, let alone control. This does not mean that value design is sealed off from the broader social world. The chosen values certainly come from cultural and political discourse. Further, one can hope that values will become more realized in a society when embedded and practiced in specific contexts. Callisto as an app comes across this way with its specific website context and the expectation that user generated reports will chip away at the social problem. However, Callisto as an organization has a greater reach than just the app as it integrates or coordinates with institutions of higher education, counseling support services, Title IX and other federal government initiatives, etc. Another way of putting this is that Callisto is a sociotechnical ensemble that includes tandem technological and social institutional activism.

With social movements of the 21st Century such as Occupy, Black Lives Matter, and the movements behind the Arab Spring and “colored” revolutions, we also see interesting ensembles. Social movement organizations increasingly have proven adept at using digital devices, social media, and social networks to gain recruits, share information, organize protests, and gain media attention (Tufekci, 2014). Regarding notoriety and influence on the public, their reach is more

extensive than Callisto. Social media giants such as Facebook and Twitter also are far reaching due to their access to a huge user base.

Value Commitment and Value Design

Facebook and Twitter are fundamentally advertising and marketing for-profit corporations that provide user-friendly platforms for communication and entertainment. As such, they are low on value commitment and value design. Social media enterprises may, however, participate in value-driven projects. For example, Facebook has partnered with the National Action Alliance for Suicide Prevention to provide members private chat with trained crisis representatives from the Suicide Prevention Lifeline. SMOs are high on value commitment but tend to be low or moderate on value design. Organizers most often use computer and information systems that are already in place and readily available to the public rather than develop their own. In some instances, this has become a liability as government authorities have found ways to block or co-opt these systems. Callisto and other value design projects, in contrast, are purposefully designed and developed to promote certain values. Callisto commits all its resources to its value-based mission. VSD and VID studies suggest that resource commitment is variable across value design projects and especially problematic with commercial products impacted by business or consumer exigencies.

Value Agency Dynamics

What would it take for social media and SMOs to gain some of the value agency strengths of Callisto? Frankly, it is unlikely that for-profit companies answerable to investors and engaged in competition will move in that direction. Nevertheless, as we mentioned with Facebook's partnership with National Action Alliance for Suicide Prevention, they may launch or support valuable projects. Google is a Callisto donor and one can imagine something akin to Google's X division devoted to generating and spinning off value design projects. These would need to have a good degree of funding and organizational autonomy to come close to Callisto's model. Ordinarily, SMOs treat computer and information systems as simply mediums for the utility of communicating to activists and recruiting new members. To become more like Callisto they would do well to develop participatory and persuasive design features.

What would it take for value design projects and Callisto, in particular, to elevate to the social impact level of SMOs and social media? First of all, Callisto has an advantage over many value design systems in that it is a mission-driven organization rather than one of many circumscribed projects within larger enterprises. For example, an online retailer may promote informed consent by designing an opt-in feature for visitors to accept or reject cookies (small files which are stored on a user's computer) but the company would have no further interest in expanding the value design project. Callisto, on the other hand, plans for expansion as it seeks more partnerships with colleges and universities and considers eventually making inroads in the domains of workplace and military.

The reporting system was designed to be scalable but Callisto's growth also will be dependent on forming alliances with counselors, courts, politicians, school administrators, etc. However, in

comparison to Facebook or Twitter it is limited by revenue, receiving most of its funding from corporate and individual donors. If Callisto attempted to generate a revenue stream, for example, by receiving payments for promotional advertising and marketing on its web site, it would risk drifting lower on value commitment. Also, it will be difficult to adopt SMO growth strategies. Movements expand by attracting recruits and sympathizers through daring ideologies and subversive acts. Despite being innovative, Callisto is committed to working within existing systems. The social epidemiological message is reformative rather than radical. A more overt feminist, queer, or Marxist ideology and defiant acts might drive away donors or have the effect of turning away some individuals that Callisto is committed to help.

Conclusion

Callisto is well positioned as a mid-level, value-driven enterprise and provides a model for reformative human rights and social justice campaigns. Due to its organizational activism, it invites those interested in value design to imagine for their projects a more overt role in social change. It also encourages us to see that such projects may occupy the same stage as social movement organizations and social media albeit with a different set of strengths and limitations. With this case study, we presented an example of how value design and organizational design may be interwoven to produce a bolder enterprise, one that is more comprehensively a social change agent. We recommend further “sightings” of such innovative enterprises, as well as, more study on value agency.

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