The Digital Stockholm Syndrome

Society and e-Government International Congress - CONSEGI 2008 http://www.conseqi.serpro.gov.br

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Abstract. This article aims to share considerations about some psychological responses to market forces in todays' ICT field. These considerations explore situations in which moral hazard meets the digital realm. It contains three sessions. I – Introduction, Morals and Ethics, Systems of Ethics, Beyond Kant. II – Proprietary Encroachment, On Software Abuse, Software Hybridization, Moral Dissent. III – Computer Hostage, Choice and Leniency, Some Moral Hazards, A Digital Syndrome.

Key words: Moral hazard, Digital standards, Vendor lock-in, Freedom.

I

1 Introduction

How to distinguish ethics from morals? How do we pick and compare moral values? How do we cast or accept moral judgments? How do we communicate or act on them? This is an attempt to explore some views on questions of this nature as they relate to software. This attempt was inspired by some discussions in which the author has taken part, at some fora where the main topic is freedom, related to software. Such discussions hovered on situations which tend to cluster into a pattern fit to be called "Digital Stockholm Syndrome", hence the title.

From Wikipedia, about the Stockholm Syndrome in general: "a psychological response sometimes seen in an abducted hostage, in which the hostage shows signs of loyalty to the hostage-taker, regardless of the danger (or the risk) in which the hostage has been placed." Furthermore, it also refers to other situations with similar tensions, such as bride kidnapping, battering, rape or child abuse cases, in which the victims became emotionally attached to their victimizers, to the point of even defending them over the prospect of being freed.

We can thus think of the Digital Stockholm Syndrome as referring to situations in which victims of software abuse may become emotionally attached to their victimizers. This raises the framing question, of what "software abuse" may mean. Actors in the Free Software movement often debate the morality of licenses for software use or related services. While some licensees prefer to ignore or downplay what these licenses say, some

Free Software activists consider most prohibitions binding non-free software licensees to be morally wrong.

The next introductory question, on the meaning of "to be morally wrong", is where we start. Those who utter this, those who hear this, and those upon whom such a judgment is cast may interpret it differently. For a brief grounding on this matter, we follow a contemporary and proficient philosopher, Jurgen Habermas, on moral conscience and communication [1]. Then we contrast our perception of his view with some about earlier philosophers, particularly Kant, Hegel and Nietzsche, to weave some opinions about the phenomenon named in the title.

2 Morals and Ethics

In day to day communications, cognitive interpretations, moral expectations, valuations and expressions interpenetrate. When aiming at mutual understanding about something, Habermas points out, interpreters are implied to raise pretensions of validity as they interact. More precisely, pretensions of truth, pretensions of correction, and pretensions of sincerity when referring to, respectively, something objective in world of things, something intersubjective in the world of social relations, and something subjective in the world of one's inner life.

In short, with the following types of proposition we communicate:

- * About the objective world (things), by raising pretensions of truth;
- * About the intersubjective world (social relations), by raising pretensions of correction;
- * About the subjective world (feelings), by raising pretensions of sincerity.

Morality is here understood as the practice of what is believed to be right or good. And when we think of whom, depending on who holds the moral belief and how the belief relates to a practice, ethics is subsumed. Some readers view "ethics" as synonym for morals, but here ethicity refers to pretensions of validity wherein the moral believer is not necessarily the practitioner. If a pretension of validity supposes a religious, metaphysical or cognitive foundation, it may be implied by the moral believer through an objective statement, that is, one subject to trueness.

Regarding the relation between morality and ethicity, Habermas draws a historic line at Kant's legacy. By introducing a new foundational mode into philosophy, named "transcendental", Kant created a new theory of knowledge. This mode aims to investigate the a priori conditions for the possibility of experience, particularly cognition. The basis for the transcendental mode of investigation is the irreplaceable character of certain mental operations that we carry on intuitively while experiencing, for which this character can be verified.

In pursuit of limits inherent to cognition, Kant separated the faculties of practical reasoning and of judgment from theoretical knowledge, placing each over its own foundation. In so doing he gave philosophy a new role, later disputed and downplayed, of ultimate arbiter for human culture. This marks the origin of modernism, characterized by a shift in the concept of reason: from the substantial rationality in world views of religious or metaphysical traditions, over to a procedural rationality to which pretensions of validity could be entrusted.

3 Systems of Ethics

To Habermas, a system of ethics has to explain the validity of propositions that imply deontic pretensions (moral obligations). Such a system in philosophy will fall short, he argues, into skepticism, if it confines the moral and normative phenomena to the objective or to the subjective realms (i.e., intuitionism, emotivism, decisionism, imperativism). Empirically, skepticism yields the belief that moral controversies are mainly unresolvable; but since Kant, congnitivist ethics have sustained that normative legitimacy stems from generalized expectations of behavior.

In facing the classical basic question of ethics, "What kind of reasoning or argument is acceptable in support of norms or moral decisions?", intuitionism, for instance, supposes that the veritable validity of descriptive propositions is the only acceptable form. But normative statements can not be verified or falsified, in the way or by the same rules that descriptive statements can. Since this fact does not stop us from discussing practical moral issues, subjectivism supposes that deontic pretensions can only be founded on naive inner intuitions about moral values.

Kant avoided such skeptical trappings, revamped by Hume's empiricism, with a universality principle postulated to bridge morals and ethic values. Named "Categorical Imperative", this principle plays a role in moral argumentation similar to the role played by the Induction Principle in scientific discourse. Applied to a cognitivist ethics, it states that a valid norm has to merit intersubjective recognition among all concerned, in the sense that the effects stemming from they all being bound to the norm are acceptable to each, whatever one's part may be.

A part in the collective acceptance of a norm (custom or law) range from one's interest being eventually hurt by violations, or benefited by them, or one's enforcement role being called upon to deter imminent violations, or to sanction violators. When this principle is applied, that is, when rational acceptance collectively converges, normative correction can claim some sense of "moral truth", from its universal and impartial character. But practical questions linger, on its cognitive nature and applicability: the will and power of few may take control of the process.

4 Beyond Kant

Some post-Kantian philosophers hold that will and power trump reason in setting expectations of behavior. Hegel criticized transcendentalism for its lack of proof of necessity and its disregard for the genesis of conscience, founding his absolutist philosophy on dialectics. Nietzsche condemned any universality principle as a tenet for morals, founding his nihilist philosophy on the will to power. Horkheimer, MacIntyre and others argue that the Enlightenment project to found a secularized, rational morals, independent of religion and metaphysics, have failed.

In fact, the means for mutual understanding have been endlessly displaced by instru-

ments of violence. In Hegel, the social conflict model of Machiavelli, Hobbes and Rousseau is reinterpreted, seen as motivated by moral impulses rather than self-preservation [2]. In his earlier work, general and individual freedoms are seen as practically sustained by moral tensions in social life, arising from individual's pretension to gain intersubjective recognition for her/his identity. This, from the perspective of an Aristotelian idea on human essence he calls "natural ethicity."

If Hegel's legacy bore fruit in Marxist ideologies, Nietzsche's can trace to Nazism [3] and to market fundamentalism. In his book *Genealogy of Morals*, Nietzsche dissects the soul of the world-order and exposes its morality, seen as made up of resentment or envy. Pity, altruism, shame, selfless love are seen as prejudices, from what he calls the "morality of good and evil" [4]. He preaches a transvaluation of all values, towards a new (i)morality, immanent in nature, beyond good and evil, in glorification of strife, war, domination and exploitation of the weak by the strong.

On the meanings of "good", Nietzsche distinguishes the opposite of evil from the opposite of bad. The first dichotomy is seen as driving the "slave morality" of Jewish and Christian faiths, where excuses for weakness would dress up as moral principles. The second one, with "bad" meaning worthless or ill-born, as shaping the noble values of aristocracy and the powerful. Observing the move from traditional beliefs to a trust of science and commerce, he declared the death of God, and reality as an endless becoming, where evolution is to produce supermen [3].

II

5 Proprietary Encroachment

Whatever the approach to morals or ethics one holds today, it must deal with the fact that information and communication technologies (ICT) make possible, in increasing scope and scale, new means for mutual understanding *and* for exploitation or domination. From an economic perspective, for instance, any utilitarian view can identify ICT with tools for competitiveness, and what this may mean – to private enterprises and to the State – hinges on that approach. Leveraged by the fact that symbolic goods in digital form are essentially non-rivalrous.

Digital goods are essentially non-rivalrous because the marginal cost of production – copying bits – is negligible. Among them, software is paramount, for being what makes digital technologies work, and for its markets being very sensitive to network effects. This drives, in turn, as social practices increase their dependency on ICT, general purpose software – operating systems, development platforms, office suites, web browsers, etc. – to become essentially anti-rivalrous, in the sense that the utility value of a program increases with its dissemination [5].

Only for the last thirty years or so – roughly half of the digital computer age – has the software sector been decoupled from the hardware industry, as the latter evolved by commoditization and the former by modularization. And only for the first twenty years or so of this period, has the productization of computer knowledge, the turning of software into

merchandise, been a dominant element in ICT progress [6]. With software owned, and the right to use a copy of a program sold – like a soapbox – through a proprietary end-user license agreement (EULA).

During this brief phase, a nascent but strategic market of symbolic goods grew and was explored, under strong network effects, by a logic of markets for physical goods. This led to the monopolization of top enterprises, to the fastest accumulation of capital in the history of capitalism, and to strategies for artificial scarcity and entrapment of clients in developed markets through opaque or legally encumbered formats and *de facto* standards (vendor lock-in). The next production model to succeed on economic, technical or ethical merits will face such encroachment.

6 On Software Abuse

As ICT evolves, it breeds new disruptive production and distribution models, like the current Free and Open Source Software (FOSS). By exploring the intrinsic non-rival nature of human knowledge codifiable as computer program, FOSS gain technical and economic efficiency, from collaboration and reuse, as software markets mature and shift their focus into services. For the same reasons that the proprietary model lose it, from having to resort to planned obsolescence to run its license renewal cycles, as its primary revenue channel needs to keep flowing.

At this point, strategies for artificial scarcity and vendor lock-in can keep delivering only by further encroachment into normative processes related to ICT (law, licenses and customs). By lobbying for radicalization of immaterial property ideology and legal regimes (patents), by practicing ever more intrusive basic licenses (DRM), by pushing the judicial doctrine that antitrust regulation is unfit for ICT, etc. A glance may suggest that only entrenched monopolists have to gain from betting long term on the proprietary model overliving, but there's more to it.

The name of the game is control. If a bunch of users and suppliers can rely solely on FOSS for their software needs, they may have autonomy to make choices on how such needs will keep getting met. Where interests can converge, they may cooperate in deciding how solutions shall evolve. With critical mass, they may accomplish and truly innovate (GNU, Linux, GPLv3). FOSS is based on semiological neutrality, a solvent of market controls. Since the proprietary system of entrenched monopolists and their partners is addicted to control, it reacts: more encroachment.

Political interference in processes shaping public ICT policies is expanded. A fig-leaf cover for short-term justification of vendor lock-in entrapments, called "technological neutrality", is pushed like a dogma to government and users. In standardization bodies, the concept of open standard is hijacked. Joint ventures to deploy new technologies are set: with totalitarian states, for wholesale content filtering and spying; with content providers, for turning users into renters of their own platforms; with FOSS shops, for selective interoperability and cross-patent truce.

7 Software Hybridization

As economists James Bessen and Michael Meurer show in their book *Patent Failure*, patents don't work well for abstract subjects such as software. In these areas, patents have fuzzy boundaries that are costly to understand, evaluate, enforce, find, and avoid. The more abstract the subject, the more work for lawyers, and the more likely that costs outweigh benefits to society in general. For half of its life, the development of software has profusely innovated ICT without patents [7]. Now they function mainly as a barrier to entry into markets and as fuel for trolls.

In this context, compounded by a global tendency towards cloud (distributed) computing, selective cross-model interoperability becomes a strategic weapon for control freaks. It allows them to tap from the pool of free open-sourced resources and to peg aggregate products and services with stealth taximeters, which can be turned on by patent enforcement and per-seat licensing after wide user dependency on hybrid solutions is reached. If this sounds far-fetched, one needs only to look at the EULA for a mobile's browser, a basic item to cloud computing [8]:

"The Software may contain third party software which requires notices and/or additional terms and conditions. Such required third party software notices and/or additional terms and conditions are made a part of and incorporated by reference into this EULA. By accepting this EULA, you are also accepting the additional terms and conditions, if any, set forth therein."

For context, look up what happened to image file formats such as gif, jpeg and mpeg, due to the compression algorithms they use. Or more importantly, look at today's market for advanced hardware devices such as RAID controllers, wireless network and accelerated graphics cards [9]. Some vendors operate under the assumption, valid for rivalrous markets, that competitiveness requires industrial secrecy, so they refuse to provide documentation for some products and instead provide binary-only drivers (blobs), which is ok in the proprietary model.

Some FOSS projects accept binary blobs for the functionality they provide. Often with a wrapper, a software which implements a proprietary system interface to allow for reuse of drivers released to that system, in the absence of direct support. One may ask if such hybridizations are good. Besides borderline normative (on licenses), this is a moral issue. An issue that wedges the FOSS community in two sides: those who joined it for the moral value of freedom deemed absolute, and those who joined it for moral values deemed otherwise or for some other reason.

8 Moral Dissent

This is a divisive issue because, when a debate over stealth hybridization is held by the two sides, any agreement over the moral issue deemed absolute, or objective, can only be reached over a binary set of possible values – Right/Wrong or Good/Bad, whereas an agreement over the same moral issue deemed pragmatic, or cognitive, can only be reached by negotiated convergence to a point over some axiological domain – about which a previous agreement is due on a mechanism for gaging harm and benefit to those involved, measurable from what's at stake.

And what is at stake? First off, a chance for hybridization to work as a tool for dissent. The more debates happen between FOSS absolutists and pragmatists, the more each side

feels to be striving to get its point across (on the issue's deemed nature) but to no avail. It is not possible to reach simultaneous agreement over these two dimensions of a moral issue except tacitly (by silence), for they are orthogonal. An absolute wrong is not amenable to value-gaging. Answering claims from the other side, to seek a mutual understanding, will not be met as intended.

Thus, the more discussion, the more frustration. The more bad emotions are likely to flare, from the other side's claim – implicit at least – to a higher or more reasonable moral ground. The more likely that benefits be less than harms (increase in distrust, resentment and entropy), inside the FOSS movement. Apart from, and irrespective of, what else is at stake. Whereas outside, in minds yet to be won by the FOSS movement, its ethics are bound to appear as matching a skeptic approach to morals. A skeptic may view such dissent as a feud between zealots and opportunists.

From the dialectic perspective, such unresolvable controversy best appear as stemming from what Hegelians call "Rousseau's paradox": an absolute will to "enforce general freedoms" (against individual ones). The synthesis? Likely to point to a nihilist transvaluation, beyond a slave morality of good-and-evil, to fulfill the power of masters of ICT control. The power of those for whom hybridization *is* a strategic weapon. Which finally brings us to what else is at stake. What is, shows up in a behavior pattern fit to be called Digital Stockholm Syndrome.

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9 Computer Hostage

If stealthily hybrid software is a divisive issue in the FOSS movement, migration from proprietary to free or even hybrid software is a thorny issue for outsiders. That is, for the vast majority of ICT users, who have been directly entrapped by vendor lock-in. First, to learn about the benefits of freedom from vendor lock-in, by comparing free and proprietary platforms, one has to cut through a smokescreen of fear, uncertainty and doubt (FUD) puffed and spread by top vendors. A list of benefits found by a business consultant who did that [10] include:

- * Fewer security and privacy problems
- * No loss of support as systems age
- * No problems running current software on older computers
- * No forced software and hardware upgrades every couple years
- * No system slowdown over time (due to Registry bloat, malware, or other causes)
- * No forced upgrade due to artificial coupling ("Installing this product requires IE 8!")
- * No need to re-install the operating system due to software corruption
- * No performance, privacy costs from built-in digital restrictions management (DRM)
- * No worry about whether you understand the legalistic license terms

- * No buying licenses, no multiple buying for desktop, laptop, and backup systems
- * No risk that the software CD you purchased in good faith is counterfeit
- * No system outages due to inaccurate license checks (WGA)
- * No errant "piracy pop-ups" when you're running legal software (OGA)
- * No restrictions on computer upgrades (WPA/WGA)
- * No restrictions on disk image backups (WPA/WGA or Registry problems)
- * No restrictions on moving disks between computers (WPA/WGA or Registry bugs)

True or not, this raises the question of why Free Software has not achieved greater market share, particularly in desktops. One discernible factor is a practice of bundling. Proprietary operating systems from one single vendor are bundled with over 90 percent of new computers sold today. While the courts focus on whether this vendor engages in anticompetitive behavior by bundling anti-spyware, browser or media software to its operating systems', they miss the real issue, the abuse of monopoly power and collusion in dealings with hardware vendors.

An issue that is gaining visibility, with dumping practices in the lower end of the laptop market, as the One Laptop Per Child project reaches preliminary success [11]. While the courts focus the punitive sentencing on obligations to unbundle and to publish the formats and protocols used by the bundled software to interoperate, the courts are trading this off with a new right, permitting the monopolist to charge per-seat licenses for the use of such formats and protocols. This has zero effect in dampening harms from abuse of power across production models.

To the contrary: by bargaining such trade-off when called to sanction anticompetitive behavior in the software field, the legal system produces jurisprudence that has a discriminating effect against emerging, more efficient, more equitable production models for symbolic goods. This endorses the encroachment into the socioeconomic fabric of monopolistic interests which can proliferate by network effects in markets that are sensitive to them, while paying lip service to outdated antitrust legislation and missing its spirit. With disregard for likely consequences.

10 Choice and Leniency

The likely consequences of such leniency, of allowing society – or self – to be victimized by these encroachments, include second order effects stemming from the anti-rival-rous nature of basic software. Some opaque software and services, some closed or legally encumbered formats and protocols, have already become *de facto* standards among the so called civil ICT standards, those that play a vital role in the preservation of civil rights such as freedom of speech, freedom of association, and freedom of creativity in an information age [12].

To grasp the reach of these effects we start with the early days of capitalism. Since the seventeenth century, insurance firms were aware of the prospect that a party insulated from risk may behave differently from the way it would behave if it were fully exposed to the risk. An individual or institution that does not bear the full consequences of its actions

has a tendency to act less carefully than it otherwise would, leaving other parties to bear some responsibility for the consequences of those actions. This prospect they called "moral hazard" [13].

As capitalism developed into a post-industrial stage, the scopes for this prospect broaden, as it relates to information asymmetry. A party with more information about its actions or intentions has a tendency or incentive to behave inappropriately from the perspective of parties with less information. To deride this fact with clichés such as "tinfoil hats", "conspiracy theories" or any other mantra from market fundamentalism, won't do away with the moral and ethical nature of the prospect. Moral hazard is not a thing confined to economic policies in the third world.

When parties have to act or react within a scope of this prospect, they tend to make choices with a common trait: leniency with regard to the "pass along responsibilities" effect. Specially when information asymmetry equates to power, and strategies to hoard and accumulate them, to will of power. The ultimate prospect, of generalized conflicts stemming from that, may be what Hobbes called "humans' natural state" in his theory of the State: fear of this is what leads us to (implicitly) accept a "social contract", from which the State emerges and takes its authority.

11 Some Moral Hazards

But a state can be trumped by another, circumvented or co-opted, as History shows. On co-option, for instance, Franklin Roosevelt is said to have warned US Congress, just before World War II, that "the liberty of a democracy is not safe if the people tolerate the growth of private power to a point where it becomes stronger than their democratic state itself. That, in its essence, is fascism – ownership of government by an individual, by a group, or by any other controlling private power" [14]. On circumvention, we proceed to examine some current examples.

Aiming to describe the Digital Stockholm Syndrome with the help of analogies, we pick two examples in which moral hazard plays a similar role. A role played out by circumvention of the state's authority, albeit with distinct levels of intermediation (parties directly involved) and of nuance (on circumvention). Call them case A and case B. Case A is the mafia. Mafia members have to abide by moral values (mainly loyalty) that are absolute and objective (to the mafia), which may conflict with individual moral values of would-be members and of would-be victims.

Case A: The mafia(s)

- 1. Mafia threatens to cripple or kill an individual if s/he does not pay extortion "tax".
- 2. Individual pays the "tax". The mafia enjoys the money and power. Individual enjoys (temporarily) her/his health.
- As mafias gain money, other individuals may feel inclined to join one or to start
 off their own mafia-like organization. (The latest most notable example: Mara Salvatrusta, in USA and Latin America)

Whatever the approach one takes to one's own moral values, be they objective, absolute, (inter)subjective, relative, a mix or none, if a mafia shows up to bully, say you, you'll

get a moral dilemma. A "Sophie's choice": Budge or die? Join in or start off your own mafia? Subjectively, no one else is morally entitled to decide for you. Collectively, such individual moral dilemmas constitute a moral hazard to society, subsuming an ethical issue: with mafias, the more people budge, the more money they gain, the more they can bully. This is clearcut, so we go to case B.

Case B: Imprudent financial institutions (i.e., investment banks, etc.) For short: imprudent bank(s)

- 1. Imprudent bank threatens to default on unsecured deposits if society's Lender of Last Resort (LLR), such as the Fed, a Central Bank or the IMF, does not bail it out, that is, rescue it through cheap, poorly collaterallized or uncollaterallized credit, portfolio auction, etc.
- 2. LLR "pays" for rescue (with taxpayer's money). Imprudent bank (LTCM, Russia's CB in 1998, Argentina's CB in 2002, Northern Rock in 2007, Bear Sterns in 2008) enjoys the bailout and (indirect) reward for imprudence. LLR enjoys avoidance of a panic run.
- 3. As imprudent banks get bailed out, other financial institutions may feel inclined to join the imprudence bandwagon. (The latest, most notable example: unfolding from the economic crisis triggered by the 2007 US subprime bubble bust)

In case A, the state's authority is being circumvented by encroachment into its monopoly for the use of physical force, and the ethical issue is over how (much) the state strives to combat this encroachment. Case B is more nuanced, begging some clarifications. The state's authority is being circumvented on its mandate to protect the value of money. The encroachment is into the monetary authority's autonomy to exercise this mandate (casuistic process, voodoo economics). The ethical issue is over how (well) the state prioritizes its leverages to conflicting interests.

12 A Digital Syndrome

To get at Stockholm's, we first discern a pattern. It may be argued, as has been in private discussions, that the cases cited here differ in important aspects. Aspects which call into question case A as an example of moral hazard. What mafias do is not mere imprudence, but aggression. They are not led to do it by the idea that someone else, bigger and more powerful than they, will rescue them from failure. A mafia threatens many weak people, whereas the bank takes advantage of an institution which is bigger than the bank. So the argument goes.

We point to the elements of moral hazard, in both cases, as defined in [13]. And we view this sort of argument as attempts to obfuscate the broadening of scopes for moral hazard in our times. What such banks do is imprudent also because it can turn into symbolic violence (economic crisis). Their idea is that many, smaller and less powerful (tax-payers), will jointly rescue them from failure; or else... Such banks threaten many weak people (with massive unemployment), whereas mafias take advantage of a state which is lenient, ineffective or co-opted.

In our information age, with the world running at the limit on main resources, symbolic violence can be as dangerous as physical violence. Or worse, because it can amplify

physical aggression. So those who study the organized crime may perceive that the cases cited here can gain by commingling. And there are other cases. ICT is strategic. The proprietary model, overlived through the encroachments mentioned here, also carry the elements of moral hazard. Leniency with the effects, and co-option to the practices, make up the Digital Stockholm Syndrome (DSS).

The more people use non-free software, opaque and encumbered formats, protocols or services, the more utility value these things gain, the more their owners can bully and commingle. A recent wave of co-optation of standardization bodies over ill-defined document formats shows how [12]. "Or else..." can mean crippled or no access to your own data [15]. Rejecting non-free software is, though, easier than refusing to pay the mafia. It takes less courage. But usage is believed to be addictive [16]. It can lead to DSS. The main symptom is a slave morality stance to serve the fetishism of some trademark, quite visible in the media (i.e. [17]). Those with a slave morality stance to serve the living God ought to know: where, and how, this all will take us.

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