

Identity, contestability and ethics of unified virtualisation of society

Marcus Wigan
Oxford Systematics, Australia
oxsys@optusnet.com.au

Abstract

Virtualisation (the replacement of physical representation by bits) in society is placing great pressures on individuals and society. The progressive loss of legal multiple identities raises major ethical and practical implications, and is being accelerated by virtualisation and shifts to anticipatory 'intelligence' styles of policing and enforcement in place of reliance on common civil law. This is now shifting to the intellectual property (IP) domain as commercial interests gain state coercive powers with the convergence between trade and IP. Lack of contestability is a key theme, and the need to establish contextually separate multiple identities. NGOs need to participate in power balancing polices to address the ethical and power conflicts arising.

1. Context

Several themes converge to highlight the importance of the role of ethical bodies in society: a major role of the faith-based community of Churches. This paper addresses appropriate roles for such organisations on the basis of the asymmetric power relationships that are created by some recent developments in identity management and new censorship powers.

It is argued that the power asymmetries being created neglect many in the community with less power and access to the tools to engage with these government administrative pressures, and that faith based organisations have an important role in this area in negotiating and enunciating the issues as they affect the less empowered.

This is a traditional role of NGOs (Non Government Organisations) but the moral imperatives that are at the core of faith based organisations gives them both the moral imperative for such engagement and a broader representative power and credibility to do so than most (usually much smaller) NGOs such as Electronic Frontiers and EPIC.

The themes chosen for this paper to exercise this argument are documented in several recent

publications in the relevant areas, and are primarily.

- Lack of ownership of one's own identity
- Pressures to remove the right to maintain context dependent multiple identities
- Transformation of the presumption of innocence to a presumption of possible harm
- Growth of intelligence techniques enabling mass population surveillance (via the case of Location Based Services)
- Progressive criminalisation of intellectual property violations with State support for commercial interests.
- Asymmetries of information leading to a greater need for contestability

Each of these areas contain very substantial potential and real risks to individuals in terms of their ability to act, and to society in some of the cumulative costs as side effects of the drive towards technical efficiencies in many unrelated domains where the interactions are not necessarily considered (or simply not given much weight) in their design and implementation.

The progressive virtualisation of society and its interconnections raises many unprecedented moral and power relationships that have yet to be fully addressed. Once identity and associated data become connected, fresh issues arise as third parties gain insight and information in a cumulative manner.

Little attention is paid here to the accuracy of such matches or links between multiple identities from different contexts, other than to emphasise that it is a very vulnerable spot in most large scale schemes to link information, and that the price of mismatches can become very high for individuals. This has become evident in cases of stolen identity in several countries, but the focus here is on the moral and power principles involved, however important the impacts can be of identity mismatching errors on individuals these are essentially issues of technical implementation.

The trends in terms of privacy and representation (or indeed misrepresentation) of identity are pressing individuals in different ways to modify their behaviour. Omnipresent

surveillance has reached remarkable levels in countries such as the UK with legal support, so that the distributed presence over time and activities of individuals are now progressively linkable: and can be and are used in real time.

This has always the case in Virtual Worlds such as Second Life, where the participation is via avatar (or avatars) and thus distanced by several layers of identity displacement. Ownership of an avatar (let alone as an instantiation of ones own physical or legal identity) is far from clear [1, 2], although there is active research on the legal status of all the entities and transactions in virtual worlds [3]. If it is of interest to the tax office, pressures for real and virtual identity matching cannot be far away.

However, the level of current and historical surveillance clearly possible and practicable in a virtual world is now emergent in real life (RL) without the additional layer of distancing of identity via one or more avatars. This is a move from multiple or single virtual identities acting in a virtual space to a real identity increasingly uniquely identifiable – and elided with the virtual one. The two ‘worlds’ are no longer clearly distinct.

This oversight, especially if suspected but not disclosed, makes people behave more and more as if they were under observation at all times or locations. This is known to modify behaviours and is sometimes referred to as the chilling effect of asymmetric surveillance. A balanced discussion of these issues in one such application is given in [4].

The Panopticon *gedanken* experiment of Jeremy Bentham specified a construction where all parties could be observed but those potentially observed could not see if they were being watched [5]. This was an illustration of a lack of reciprocal visibility, or a lack of contestability of the actual state of observations being made by the guards. This is an amplifier of the effectiveness of a single guard by presenting a situation where no one in the construction could be certain they were under observation at any given time – and so had to adjust their behaviour accordingly.

“Bentham laid down the principle that power should be visible and unverifiable. Visible: the inmate will constantly have before his eyes the tall outline of the central tower from which he is spied upon. Unverifiable: the inmate must never know whether he is being looked at at any one moment; but he must be sure that he may always be so”

Foucault [6] identifies this as an exertion of [structural] power.

This is now a reality in many physical locations with heavy CCTV coverage, and the

equivalent in cyberspace is a live issue. It is one of asymmetric power and a lack of contestability. This is illustrated by moves by some governments to impose asymmetric observation of all internet users and their activities.

This is a straightforward side effect of the internet censorship regime now being put in place in Australia where the cyberspace equivalent of CCTV cameras is to be implemented using a secret blocking list and applying the necessary universal coverage of all internet access required to do so.

The asymmetric power relationship that this creates is a source of real or potential power to modify behaviour using minimal active resources. This is exactly what the Panopticon was designed to achieve. But it also raises a greater set of interacting ethical issues due to the recording and linkage and potentially automated active surveillance that it enables. Such a system goes far beyond a Panopticon in its scope and potential subsequent usage. The effects on real time behaviours are simply the basis for extended and cumulative monitoring.

Omnipresent surveillance, real or imagined, encourages covert behaviours and avoidance, and shrinks the space for people to be themselves. This changes moral judgements and behaviours in ways that legitimise subterfuge and active misdirection. Facebook’s recent (reduced) privacy changes led to formal advice from Barry Schnitt, the Facebook spokesman [7], to lie about personal information to conserve their privacy. This breaks the terms of non-misrepresentation to which all Facebook members signed up.

2. Key Elements of Digital Identity

The identity that we have is becoming legally a collection of digital tokens, which may be exchanged, matched, sold and collected in virtual space with a significant cumulative commercial value. This has two major effects.

We do not have ownership of these tokens – which are ourselves in different forms [8, 9]. Ironically in virtual worlds (if not the real one) we may have some rights over our identities as encapsulated in our avatars [1]

In a very real sense we have lost ownership of our own identity, which has now become a commodity in which we have no property or moral rights. They are items of value, and of ever greater value as history and associated data is attached to them. As a result they can be – and are – traded in the marketplace, stolen, lost, and leave us vulnerable with little redress. This loss of

dignity is hardly the most alarming aspect: our property and legal rights are now at risk in exponentially rising ways as a result.

Steadily growing power asymmetries are created by the ever-accreting function creep that is enabled by this ability of information aggregators to steadily draw in historical and other data at each stage of the efficiency drive to converge identities to a single token, and to assemble data from diverse current, historical and (in some cases real time) sources linked via these unique tags.

This movement and objective is hardly new, and has decades of steady growth illustrated by the following list of examples.

- The Health Insurance Commission's Australia Card of the 1980s,
- The Australian Tax File Number
- The wide use of the US Social Security Number
- The lifetime student number being brought in by the current Australian government,
- The lifetime linked health record, also being brought in by the current Australian government, and
- The biometric and standardised linked driving licence records steadily being brought in and cross linked across Australia
- The regular efforts to bring in a national ID card

These are all aspects of these keys to our own identity - which we no longer own or control.

Wider implications include another moral issue. Spent convictions, or events while people are legally defined as children, have in the past been kept from the public record.

One of the inevitable losses from a proliferation of poorly implemented systems reliant on a single identity or matches between multiple (legal) identities on an individual in different contexts, is that such historical protections are likely to become moot, whether by accident or design. The development of sexual offender registers is an example of the latter.

The loss of history is incredibly important to individuals' development. Forgiveness, growth and fresh opportunities often depend entirely on the provision that errors, convictions, and negative events and treatments to be buried by time to enable new growth in a person. Without spent convictions, rehabilitation is marginalised.

There are substantial social and moral issues that have not been widely recognised as disempowering and many of the less advantaged in society. There is a real case for broad faith based organisations to articulate these moral and

social prices, and work on behalf of the less advantaged to ensure equity of their treatment.

The right to be forgiven and to start anew is a fundamental moral (and very practical) theme in personal growth and is present in most religious frameworks. Can we afford to lose it?

3. Location Based Services (LBS)

Identification is converging between the virtual (which is mirroring and indeed managing) the real world. There is a critical difference, in that virtualisation removes location as a feature, and it becomes just an attribute.

In RL (Real Life) location is a special kind of identity, and has considerable power in a fresh and perhaps unfamiliar way.

Intelligence investigation techniques are about extracting and refining populations of interest to smaller groups, and to enable acts on the whole group so selected to prevent and anticipate actions.

The logic behind this approach is that inconveniencing or even damaging a number of innocents is an acceptable price to pay for pre-emption of a really bad event (eg. Terrorism).

Location based services are now allowing the extraction of populations of interest simply on the basis of the patterns of occupation of the same space at coincident or different times.

This is such a powerful technique that it is often overlooked that a very large number of people will get tagged for some sort of probability of association with the Bad Hats being sought.

This type of surveillance is totally undetectable and leaves unerring (and indelible) digital footprints all over the digital records of the parties caught up by it.

One (or ones administratively imposed unique identifier) becomes '*you are where you have been*' [10, 11, 12] and progressively "*with whom you might have shared time and space*' [13].

There are several moral themes introduced by LBS. The first is the same asymmetry of power in a different guise. The second is the reversal of the onus of proof which is familiar feature of intelligence based approaches, but mixes very poorly with civil law principles. A third is perhaps the most insidious of all. We cannot know that we are targeted or identified or of interest through such associative indirect surveillance.

We have to take no action (which we must if we access the internet), and even if we have access to all the information or CCTV footage in which we are present, the usage of this information is completely non transparent.

This does not raise any moral issues – other than those raised by any form of surveillance – but it does expand the use of data mining in a remarkably powerful way. All that is required is access to the bulk data about a specific location.

Individuals can choose to take decisions to offer their location freely for the benefits of offering information about their locality, to find people of interest nearby (dating using LBS and proximity feedback was the first mass takeup of LBS in Japan).

Here there is a clear decision to make ones detailed location and movements public. However, if such services require continuous operation then the wider detailed time and space patterns of ones' daily life also become transparent. Again, if this is done consciously – as many do – then the cumulative records become very valuable to all sorts of commercial and other parties. It also exposes people to quite sensitive issues of precise location, time, and with whom.

If this information is not managed by the individual concerned, then the levels of detailed surveillance and knowledge about the person, his or her activities, locations and habits can easily become public and traded by third parties. The change in privacy control available to users of Facebook illustrates how this can occur with retrospective effect and enhanced commercial advantage to Facebook.

The law enforcement aspects of GPS and anklets has been deployed in several countries for some time, and is reported to be most effective. Changes in the access and control of LBS data offers a similar level of asymmetric knowledge to third parties – in real time.

Many of the previous moral and power arguments and issues would then apply equally well to GPS and LBS.

3. Ethical Issues

When unique identifiers are available, then history can become impossible to lose, and forgiveness and regrowth also become impossible. To take an emotive but widely recognised example; even the most minor youthful sexual transgression has the lifetime potential now to destroy an adult life with no recourse. Harbingers of our emergent joint predicament are the paedophiles released after decades in prison.

The context of long-ago (and previously long forgotten) mistakes is rarely kept with the types of records we are now at risk from, and much is hearsay or often unverified. Yet we have no opportunity to see this, and correct it. Accuracy in

events is not a contextual perspective, and asymmetries in information access have always been sources of great power. These opportunities are growing, and raise great moral questions about ourselves, our society and the faith based institutions that project moral values into these great administrative debates.

One form of self-protection is the concept of context based multiple identities [13] where the identity is appropriate and verifiable and for a specific purpose in a specific context – and not linkable to any other. If such a multiple identity right were to be enacted, and software systems were to be implemented to support it in the growing number of major systems that require some form of verification of an identity, then privacy could be assured as well as adequate verification. This would not need the same degree of a quarantining of different information sources and could avoid many of the now common misadventures in cyberspace where identity tokens become public or available, whether by mistake or by intent.

Such a strategy would also serve as one level of protection against identity theft, or misattribution of evil acts to ones records in situations or applications other than the one for which the identity was contextually appropriate, and offers some small safeguard against inappropriate use of access (legal or otherwise) to collate damning information about people for blackmail or worse.

The widespread bureaucratic trend to regard unique identity as the **only** identity, and use of more than one as a reason for suspicion, amplifies these risks.

The reality of terrorism and the expansion of intelligence-based approaches to anticipating bad events have further amplified the risks inherent in these trends.

Intelligence is about anticipation; about using probabilities to prevent acts and events, and this approach has little or none of the civil law framework of proof and admissible evidence, let alone facing one's accuser. These are often necessary conditions to be able to act to prevent bad events occurring.

The ethics of such approaches are based on the utilitarian principle of the least overall damage. Yet individuals are intrinsically valued in faith based organisations, especially the powerless who often have no other voice.

Moral imperatives suggest that multiple identities, and contextual verification and limited linkage of 'identities' should be a fundamental

principle in a moral world. There is as yet little sign of this being recognised.

4. Intellectual Property Rights (IPR)

The growth of intangible property as a major resource has led to huge pressures to exert control over intellectual property of many kinds. This is perhaps not the time to explore how censorship and control of information of all kinds is not only possible, but recently has become a major target of the virtual worlds.

It **is** the place to address the near universal impact of intangible property (music, words, videos) and how criminalisation of the most minor offences or perceived violations is now to be backed by the full power of the State in support of large scale commercial interests. If this is in any doubt check ACTA [15], and the World Customs Association moves [16] on IPR. Yet the access to and use of IPR laden goods is nearly universal, so any monitoring system would be a de facto micro-surveillance system, and the data collected would have a huge exploitation value way outside the domain for which it would figuratively be being filtered and collected.

However instead of a burgeoning of creativity as intangible goods become globally accessible, as Lessig [14] has graphically pointed out, a dead hand is falling on this generations' creativity: yet this is what the hand over of an access use and denial of use monopoly "copy right" was originally compensation for. Censorship and mass monitoring of individual access to IP resources swiftly converge into censorships of other kinds: self and otherwise.

Is this not a moral as well as an economic issue? Censorship is one word, responsible limitation of access is a paternalistic equivalent in many ways another for the same effect on the internet.

The moral issues raised by the commercial protection mechanisms now being proposed in trade negotiations are precisely the same as those in the other areas we have just discussed.

An additional moral issue is that the power of the state is being used to replace commercial civil actions and thus is not readily contestable manner. This is another asymmetric power issue. The links with internet censorship are difficult to avoid, as any universal filtering process may be used as well for one purpose as another.

5. Organisational Imperatives

These are simply examples of unbalanced power, essentially asymmetric information power, and the principle of contestability is badly needed to allow a more just equilibrium to emerge.

The special role of information technology and the other technologies discussed is that their application can be so deep and pervasive while still economic to implement on a blanket basis.

Religions have always played a major role in expressing and unveiling asymmetric abuses of power, the information and virtual worlds now make this a newly central role for them.

We would argue that the faith based organisations, of which Churches are a major part, have a special responsibility to formulate ethical and moral stances consistent with their value systems and representational opportunities and express constructive concerns as voices not only for their own communities, but for the many who draw upon the ethical underpinnings that they provide and propagate.

The rate at which virtualisation of society has progressed, and the rise of invisible and intangible property means that these voices have not yet been heard in a coherent way.

Theirs would be a valuable contribution to these many debates, where the law is struggling to adapt, and where great resources in intellect, values, ethics and communication can be drawn from their constituencies.

6. Governance Imperatives

The issues raised are caused at least in part by a failure of governance. Policy, even evidence-based policy, is less and less transparent.

This is due again in part to shifts to an intelligence approach driven by anti terrorism reactions, but the effects are much wider [17]. The areas of planning and transport are increasingly vulnerable to 'policy based evidence' instead of 'evidence based policy'. The correct for this is contestability, as this provides both the transparency and a participation framework required to harness all areas and sources of expertise in the community [18][19].

There are close parallels with the ethical and moral issues in the virtualisation of society and the need for contestable debate on the manner in which the ethics and morals of the processes now gaining momentum can be moderated.

Unless formal organisations with an ethical and moral *raison d'être* develop clear and well articulated policies embodying ethical values, the current frameworks of administrative convenience, efficiency and anti terrorism will

continue to frame the social and policy agenda, largely unchallenged.

It is not only the law that needs to catch up with the virtualisation of society – so too does the articulation of social, ethical and moral values by the full range of organisations and people with both the capacity and will to do so.

7. Conclusions

Administrative issues are converging from many directions to impose a single identity on individuals at the same time as building a lifetime tracking and linkage of all their activities and involvements in one area after another. However difficult these policies are to implement in practice, due to the scale of information systems and organisational capacities yet to be realised, the directions involve substantial new asymmetries of power.

Individual (usually fairly small) NGOs are working on the various problematic aspects of each of these many trends and developments out of concern and conviction of their members.

There is also a broad moral dimension underpinning concerns over these developing trends, which share deeply held values common to many Churches and other faith based organisations regarding fair and morally balanced exercises of civil power.

While NGOs and individuals do not need to share the same faiths and belief structures as these large organisations, there is still substantial common ground in their joint concern for balanced powers between individuals, the State and – particularly – the enactment and administration of these powers.

The established trend to legislate for secrecy and asymmetry that emerges in all the selected streams of action embodies real or potential power imbalances that demand a higher level of broader engagement by the large faith based organisations, driven by their own value frameworks. Such enhanced levels of engagement will bring with it a disproportionate number of the less powerful in society, and technologists legislators and administrators would in many cases find such a more assertive role a very constructive development in negotiating balanced and workable solutions in these difficult and contentious areas.

The pervasiveness and extent of the information technology instruments now make it critical that the debates expand beyond a technical and political level, and engage the moral and ethical as well.

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