Serge Gutwirth

Received: 2 September 2008 / Accepted: 6 December 2008 / Published online: 20 February 2009 © Identity Journal Limited 2009

'Exister, c'est différer' Gabriel Tarde

A world of Internet of things, ambient intelligence, profiling and control

The 'Internet of things' and 'ambient intelligence' enable the web to reach out to the (real) world of physical objects (and vice versa): billions of everyday objects are linked in networks and intensively exchange information. Computing melts 'invisibly into the fabric of our business, personal and social environments, supporting our economic, health, community and private life' (EC 2006; see also D. Wright et al. 2008). Technological devices, such as RFID and biometrics, make the 'Internet of things' happen right under our eyes. The building of 'Web 2.0' and its interactive and participative dimension leads to an increasing availability of information (or 'content') generated by the users themselves and their social interactions (González Fuster and Gutwirth 2008).

Aside from their many advantages and potentialities, these changes do significantly multiply the possibilities to identify, control and retrace people, since every imaginable object might contain digital artefacts, linked or linkable to a network. Continuous and detailed monitoring by government and private actors, with or without identification of the individuals, will be perfectly feasible: privately and publicly owned systems, not human beings, will collect and exchange data about people's behaviour making the construction of very pervasive and performing profiles not only possible, but also easy and automatic (Hildebrandt and Gutwirth (ed.) 2008). 'Being profiled', then, becomes a real threat, because profiles can be generated and applied to individuals without their knowledge, sneakily inducing them to adapt and re-adapt their behaviour to a context moulded by other actors. At

Law, Science, Technology & Society (LSTS) - Faculty of Law and Criminology, Vrije Universiteit Brussel, Pleinlaan 2, B-1050 Brussels, Belgium e-mail: serge.gutwirth@vub.ac.be



This article has been first presented at the *First International Workshop on Identity in the Information* Society, 28–30 May 2008 Arona, Lago Maggiore, Italy. Thanks to James Backhouse for his encouragement and good suggestions.

S. Gutwirth (\subseteq)

that point, in fact, they pretty much become like Kafka's Josef K. who is rendered completely transparent and controllable by a totally opaque system of power, which mixes private and governments agents. Moreover: the actual control framework will function in real time, through instant modulations and adaptations of the environment. In sum, both governments and private actors will monitor and assess individuals' behaviour continuously in order to fit them into new and temporary profiles that those individuals cannot control and which they are often not even aware of (cf. Gutwirth 2002 pp. 66–82, with reference to the upcoming of *control societies* as described by Deleuze 1990 and Cohen 1985).

Indeed, the point is not just whether such profiles are going to be abused, leading to unfair discrimination. As Mireille Hildebrandt writes the problem is their mere use:

'an abundance of correlatable data and the availability of relatively cheap technologies to construct personalized knowledge out of the data, create new possibilities to manipulate people into behaviour without providing with adequate feedback of how their data have been used (...) (T)his may lead to major shifts in power relations between individual citizens on the one hand and commercial or governmental organizations on the other. The crucial issue is not abuse, but the fact that we have no effective means to know whether and when profiles are used or abused' (Hildebrandt 2008 p. 318).

The hopes of a 'fundamental right to identity'

For some authors the issues I raise are intimately related to questions of 'identity': the multiplication of technological possibilities would adversely impact upon individual and/or collective identities of people. Those authors fear a severe loss of control of individuals upon their identity. Prins, for instance, is concerned about the repercussions of such developments upon the way individuals and groups perceive their identity. She argues that the profiles, which are at the very core of technological possibilities, can be considered as imposed identities, both individually or collectively. She also fears that such profiles generate biased perceptions of individuals. Accordingly she makes a plea for the transparency of the profiling process and for access to it by those affected (Prins, 2007).

Prins and De Hert call for the recognition of a *sui generis* right, namely the 'right to identity'. The hope is that by making explicit and 'legal' the value of identity, a basic right would provide better-equipped instruments to balance the private and public interests at stake in a world of internet of things, ambient intelligence and convergence than only the rights to privacy or liberty (Prins 2007, De Hert 2008).

However, such a plea for a 'right to identity' first and foremost implies some clarity about the notion or concept of identity. To this end Ricoeur's distinction between *ipse* and *idem*, as has been highlighted by Hildebrandt, is particularly helpful (Hildebrandt 2008; see also De Hert 2008). Pursuant to this distinction, personal identity is a mix -or an articulation- of *ipse* identity and *idem* identity.

The first, also called 'self identity', is the sense of self of a human person. It is reflexive consciousness or 'selfhood', implying both an 'I' -which is the irreducible point from which I see the world and myself- and a 'me', and which represents the way I



perceive myself. There is nothing behind or above the *ipse*: it is just there at the source of one's will and energy: it is where the *hubris* comes from. The *ipse* is quintessential because of its irreducible presence and subsistence. It is here, present and persisting, but it is not made of a substance nor has it any substantial homogeneity: it is continuous through time and space, but it does not *per se* remain stable or consequent, let alone 'identical'. The second, the *idem* identity, or 'sameness identity' is the objectification of the self that stems from categorization. *Idem* identity is not one, but several depending on the sort of comparative categorization at work: sameness refers to social, cultural or religious identities, to legal or 'administrative' identities. In fact, the *idem* identity expresses the belonging of person to a category: it allows societies to integrate the individual and allows the individual to integrate him or herself in the society.

In sum, 'identity' then is a kind of 'to and fro' between *ipse* and *idem*, between the individual thrust, and the categories (s)he matches with or to which (s)he adheres. For Hildebrandt, the link between *idem* and *ipse* is a strong one: she holds that personal identity cannot flourish when *ipse identity* is deprived of *idem identity*. Referring to Isaiah Berlin's famous distinction, one could say that identity necessitates a mix of negative and positive freedom, or in other words: a good balance between on the one hand the individual's protection against interferences by the state and other actors, and, on the other, his or her empowerment, yielding his or her possibilities to act affirmatively, to join and to quit, to adhere and to resist, to belong or not.

The reason why I evoked the distinction *idem* and *ipse* is that these philosophical concepts have been mobilised in the field of prospective constitutional thinking. As a matter of fact, in his UNESCO lecture of September 2007 Paul De Hert went as far as to suggest the recognition of a 'right to identity' with ample reference to the distinction between ipse and idem. He tentatively proposed following formulation: 'States Parties undertake to respect the right of each person to preserve and develop his or her ipse and idem identity without unlawful interference' (De Hert 2008)

One of his main arguments in formulating such proposal is that the right to privacy alone will not do the job because it is too limited, particularly in view of its predominantly 'negative' or shielding aspect. Privacy would not allow building up positive claims related to identity. As an example, Paul De Hert focuses on the right to have a 'civil identity' which in effect permits the access to basic services. UNICEF calculated that some 50 million babies (41% of births worldwide) are not registered at birth, and thus remain without any civil identity document. This has consequences for the health, education and well-being of these children, because '(o)ne can be entitled with rights only if he has an identity. No political, civil and social right can be enforced on anonymous crowds' (Mordini and Ottolini 2007). The example shows the importance of the recognition of a civil identity - a particular *idem* identity - to enhance and protect fundamental rights. Effective and enforceable human rights are indeed difficult to conceive without identification of their beneficiaries.

More generally, for De Hert, many existing identity-related issues cannot be dealt with from a privacy-perspective. When homosexuals seek anonymous contacts with others fearing stigmatisation and professional harm, the issue is certainly identity-related, but what kind of issue is it from a legal point of view? A privacy issue? A liberty issue? Or a freedom of movement issue? And what about a right to oblivion ('droit à l'oubli') which would recognise a person's right to have some facts erased from memory (Lemmens 2002; Warner 2005). Indeed, there is a tension between *le*



droit à l'oubli and le droit à la mémoire and it is very evident in the Internet of things, where forgetting seems to be made very hard. But it is very doubtful that such a 'right to be forgotten' could be construed as a spin off of the right to privacy, since most of the time conflicts concern public facts (for instance, persons involved as victims or as witnesses of a crime) that are not protected by privacy rights. On the other hand the protective importance of such rights cannot be underestimated in societies that are sliding into pervasive control and profiling (De Hert 2008).

However, when formulating his proposal of a right to identity, Paul De Hert remained cautious in three ways. Firstly, he explicitly distinguished between *ipse* and *idem* identity, in the hope that such distinction would serve as a constant reminder of the complexity of identity (against a 'freezing' effect of statutory terms). Secondly, he expressed serious reservations concerning the dangers of collective identities (such as those shaped by religion, gender, ethnicity, race, and sexuality) for the freedom and the autonomy of the individual: such identities have the power to constrain individual freedom and curtail the ability of the individual to construct his own life (see below). Finally he weakened his proposal by suggesting that the proposed 'right to identity' might more be something for the UNESCO *Code of ethics for the information society*, rather than for a constitutional bill of rights.

As well as such appeals to enact a fundamental right to identity, the Belgian Judge Françoise Tulkens has pointed at the ongoing judicial elaboration of such a right, more particularly in the privacy case-law of the European Court of Human Rights. She sees this as currently one of the main actual developments in Strasbourg's jurisprudence. The Court has unfolded a series of decisions that for her have progressively led to the recognition of a right to identity as an inherent element of the right to privacy alongside 'traditional' elements such as moral and physical integrity (Tulkens 2007). Tulkens claims that a 'right to identity' is emerging and that it already protects some aspects of personal identity such as gender identification, name and sexual orientation and sexual life. For example, in Jäggi v. Switzerland of 13 July 2006, the Court decided that it is a violation of the respect for private and family life to make it impossible for a person to obtain a DNA analysis of the mortal remains of his putative biological father. The Court considered that the right to identity protects the right of an individual to know his or her parentage, as an integral part of the notion of private life. In the dissenting opinion of Odièvre v. France of 13 February 2003, seven judges went even further by generally stating the crucial importance of the right to identity: 'We are firmly of the opinion that the right to an identity, which is an essential condition of the right to autonomy and development, is within the inner core of the right to respect for one's private life'.

De Hert's proposed formulation of a right to identity should not be considered contrary to this development in the case law of the European Court of Human Rights, even if one of his arguments is that privacy law is not sufficient for the (whole) task. Both paths, the constitutional adoption of the right to identity and its implicit presence in the right to privacy, should be seen as complementary, whereby De Hert's point is that explicit formulation of the right to identity would open a new conceptual space for a better and a more explicit taking into account of all aspects of identity, namely its negative or positive, defensive or affirmative aspects, its *ipse* or *idem* side, its individual or collective dimension and the different registers of identity: the self, cultural, social, religious and linguistic identities, and many more indeed.



Against 'collective identities'

But why rely on 'identity'? Why build answers to urgent problems on a problematic and controversial ground? There is no unanimity about the benefits and emancipative power of 'identity' and *a fortiori*, this extends to 'the right to identity'.

In the first place, there are good reasons to be suspicious to collective identities because, per se, claims asserting their existence clash with individual selfdetermination and liberty (Gutwirth 1998a). From that perspective individuals might need protection against groups and their identity, rather than a right to identity. Claims of collective identities can and do, de facto, only survive through a narrow focus upon one or two traits of an individual, reducing the individual to a ridiculously small part of his or her numerous characteristics, attributes and possibilities: he or she then becomes black or white, man or woman, gay or straight, Croat or Serb, Hutu or Tutsi, punk or disco, Flemish or Walloon. From that point of view, I find myself to be Flemish simply because I speak the language. And as if that was not enough, I am supposed be proud of it. And even worse, if I shrug my shoulders at this announcement, and turn to something interesting, I take the risk of being seen as a traitor by those who call themselves 'my folks' and believe that solidarity passes through what they decide to be determining for their identity. But the point is that I, Serge Gutwirth, have never met this powerful 'identity' to which a great majority of the Flemish politicians refer to as if their LP got stuck in the same groove since more than 30 years.¹

Additionally, group claims are always both exclusive and inclusive. They are by definition exclusive because the asserted existence of a 'we' implies that a distinction must be made with 'all others', and hence, with all the ones who are 'not one of us', with all people who for one reason or other are no part of the group. From nationalists to football supporters, a united and articulated 'we' is alleged to exist, and those outside are different and not included, if not suspicious, suspect, dubious, dangerous, and so on. Very often the others turn into enemies. To be sure, group claims do not always take that extreme form, but the claim itself simply must be exclusive: otherwise the group cannot exist. On the other hand, group claims are also problematic towards the inside, because they are by definition inclusive, and inclusion is not always a positive value: inclusion is a powerful mode of social control and pressure (Cohen 1985). Indeed: in order to affirm a collective identity, the individual differences between members of the group must necessarily be minimized and smoothed out. The more collective identities become affirmative, the more they have a flattening effect, the more they render uniform: they normalise, they reduce diversity and complexity. Rich individual personalities are de facto reduced to uni-dimensional and static models which are of course designed by the powerful in the group.

Against this background, some quick but fundamental conclusions can already be drawn. Firstly, the law should never consider that an individual is *predetermined* or *determined* by a collective identity because such a position is contrary to the

¹ Here I cannot resist quoting Paul Veyne, the French historian who studied Greek and Roman civilization, and who came to the following strong conclusion: 'Une culture est bien morte quand on la défend au lieu de l'inventer' (Veyne 1976 p. 13).



principle of individual self-determination, a cornerstone of human rights. Secondly, a democratic constitutional state should never be allowed to impose a single collective identity - be it a religious, ethnic, cultural, linguistic or even scientific one. On the contrary, it must allow for the development of countless (in)dividualities and of diversity. That also is precisely what human rights stand for. As Alain Touraine wrote: a society that is culturally homogeneous is by definition antidemocratic (Touraine 1994).

Let it be clear that the foregoing does not imply that individuals do not have the right to identify themselves with groups, or to adhere to a collective identity. Indeed they can do that: individuals can choose to belong to or become members of any group. And, strangely, less obviously, also to leave it. But in that case the individual choice again prevails and groups are seen as associations or networks: you opt in, and you opt out, others do likewise, and all in all, the group is never the same as it was. Moroccans living in Antwerp will become Flemish and change what the Flemish are, and so on. In other words, everyone is free to believe that he/she is predetermined by language, territory, national character, religion, blood or whatever; act this way, be proud of it and use it as a political platform. That is the very reason for the existence of freedom of speech, freedom of association, freedom of conscience and privacy of freedom.

My point is that groups do not pre-exist as persisting entities that remain identical but on the contrary groups, for me, are willingly constituted by their individuals, and they are permanently in a state of flux. This implies that collective cultural, religious or ethnic identity claims should never become a normative standard, but this does not stop groups and collective entities acting as subjects and actors. It only means that those groups or collective entities must always be deconstructed to networks of individuals who freely join in a contextualised and temporary common pursuit.

Beyond individual identity

At an individual level also, 'identity' has struck me as an absurdity: who on earth would be willing to remain 'identical' and to try to stick to what he or she already is? Life, for me at least, is exactly the opposite: it is adventure, exploration, pragmatic, constructed, it is *transformation* ... It is certainly not limited to 'being' or 'remaining': what makes life interesting is *becoming*. It is not defending what 'is' and should 'remain', but it is the construction of what comes next, and next and next in an entanglement of complex bifurcations, with myriads of possibilities. Yes, I believe that every single event in my life changes me, and rearranges my possibilities in an irreversible way. Why on earth would I want to preserve or defend an 'identity' since I am not dead yet? Life transforms me, and - I think myself lucky - it has never left me 'identical' to what I once was...

To use the words of the French philosopher Michel Serres, individuals are *métissages*. They continuously change when they interact with others, with ideas, with things and experiences, with categories and objectifications, with profiles and expectations. They are inextricably linked with the contexts and times of their lives. Identity then is the exact opposite of 'identicality' or sameness in time and space (Serres 1991, 1992). 'Votre authentique identité se détaille et, sans doute, se perd



dans une description de l'infinité virtuelle de telles catégories, changeant sans cesse avec le temps reél de votre existence (...) Qui êtes vous donc? L'intersection fluctuante dans la durée, de cette variété, nombreuse et bien singulière, de genres. Vous ne cessez de coudre et tisser votre propre manteau d'Arlequin, aussi nué ou bariolé que la carte de vos gènes' (Serres 1992, 8).

I don't think this vision is at odds with the *idem ipse* scheme, since identitymétissage is an endless dynamic and productive interplay between an inner thrust and external references, happening in two ways: through adherence and through resistance. In fact, identity is very much a constantly renewed product of individual self-determination and action. Hence, I would prefer not to speak about 'identity' in the sense of something that defines me, that I would 'inhabit' and that I should stoutly defend in order never to lose it because that would mean 'losing myself'.2 Such an identity determines its bearer or holder. Following the French philosophers Gilles Deleuze and Isabelle Stengers, I would rather speak of 'belonging' and 'becoming'. To use Isabelle Stengers' words : 'A la différence de l'identité, l'appartenance ne définit pas celles qui appartiennent; elle pose bien plutôt la question: de quoi cette appartenace les rend-elle capable?' (Stengers 2006, 17). In the multiplicity of encounters -with others, objects, circumstances- we invent new forms of becoming, rather than sticking to something we already were. A 'belonging' does not define an individual, but it creates new possibilities, it activates a process, it yields something new.

Against a fundamental right to identity

In the light of the above it will come as no surprise if I disagree with the idea that 'a right to identity' would be beneficial. Let us first assume that such a right would be considered as a full blown *subjective right* that an individual would have pertaining to his or her identity. In that case we would immediately face a number of technical problems. From a legal point of view a subjective right requires a number of conditions to be satisfied: 1. a right must have a holder or bearer: a *subject* that can be clearly indicated, identified and ascertained; 2. a right must have a clearly defined *object*: it must tend to the realization of something determinable; 3. a right must *opposable* to identifiable third parties, it must have one or more identifiable addressees and finally 4. it must be *sanctionable/punishable*: coercive compliance/constraint must be possible. In our case the main problem would indeed be to define or describe the 'object' - namely 'identity' - of this new fundamental right for legal use (Gutwirth 1998a, with references)

Indeed, Paul De Hert is aware of this difficulty, and that is why, I think, he introduced the philosophical notions of *ipse* and *idem* in his legal proposal. With those two philosophical terms, 'identity' would at least be described in a complex way: one would have a right to a complex object, a complex identity. But, as I argued, identity is *undetermined* and *underdetermined*: defining it, for legal purposes, would be contrary to its essential features. Hence, the enacting and enforcing of a right to identity might eventually have a constraining and freezing



² Thanks to Laurent Desutter for these formulations.

effect since 'identity' -or *ipse* and *idem*- would be transformed into a legal qualification: a legal concept that judges use to 'take up' or 'subsume' the facts of their case. In each case again the judges would have to answer the question of whether the actual claim or set of facts, *are* or *are not* to be considered as an aspect of 'identity' that deserves protection. This, in my opinion, is not only a technical difficulty, it is also a danger because it implies that judges will have to differentiate between protected and non-protected expressions of identity, a decision which will be ultimately dependent on their moral, normative or political choices. Since identity, as I describe it, is pre-eminently contextual and relational, since it is always in transformation, since it is a permanent and undetermined process, it should be protected against any form of definition. Considering identity as the 'object' a subjective right, however, implies such legally constraining description and should thus be refused.

At a more generic level it can convincingly be argued that the law never directly addresses the flesh and blood individual. When the law intervenes, the latter is always turned into a 'person', which etymologically means that (s)he puts on a mask, that (s)he will be playing a role, that his or her voice will sound through his legal personhood (per-sonare) (Ellul 1963, Foqué and 't Hart 1990, Thomas 1998, Marguénaud 1998, Despret and Gutwirth 2009). The law, and I believe that privacy plays an essential role here, must protect what lies behind the *persona*, the mask that *technically* makes an individual a legal person. This legal personhood is the utter limit of the reach of the law. It must preserve the roots of the individual autonomy against outside steering, against disproportionate power balances, precisely because such interference and unbalanced power relations are more than only threatening individual freedom, they are also threatening the very nature of our societies.

Clearly, as regards 'identity', opacity and shielding are needed, not a subjective right which implies an affirmative/positive description of identity, and at once of what will fall outside its scope of protection. Inventing a 'subjective right to identity' is probably the best way to kill identity as a dynamic, open complex process, just as 'a right to friendship' would be an excellent weapon to kill the open, unpredictable and unconstrained dimension of friendships (Gutwirth 1998b). Both friendship and identity - the interplay between ipse and idem, the process of becoming - belong to what Jean Carbonnier calls *le non-droit*: the sphere of non-law, of what lies outside the law. Friendships are outside the law, if the friends had wanted bring their relationships under the law, they would have founded an association. Carbonnier writes: 'Il est ainsi une foule de relations, de conventions officieuses qui demeurent dans la nuit paisible du non-droit, parce que ceux qui les ont noués n'ont pas eu la volonté de les porter au grand jour du droit'. And he adds 'les gens heureux vivent comme si le droit n'existait pas' (Carbonnier 1995, 34–38). Identity is a part of this non-law and it should remain there as a matter of principle.

What does such a position imply, referring to the law and its current rules in force? Nothing very spectacular actually, and namely, that what we understand under 'identity' the process of becoming, the *métissage*, the interaction between *ipse* and *idem*, the way we cope with external categorizations, be it resistance or adherence, would be considered a part of our 'liberty' and 'self determination' as it is protected by a conglomeration of human rights and fundamental liberties, amongst which, indeed, privacy plays a crucial, but not exclusive role.



If identity is a highly personal 'va et vient' between *ipse* and *idem*, between the individual thrust, the self perception, and the categories I am matched with or I adhere to, if identity is what I become through *métissages* and through the 'belongings' that spawn new possibilities, then, in the first place, identity should be protected against interferences and disproportional steering from outside, from the state and the others. That is why the negative aspect of freedom -the maintenance of legal, administrative, political and ethical opacity- is and should remain quintessential. From this point of view issues pertaining to 'identity' should in principle be protected by normative prohibitions of interferences such as foreseen by privacy and some aspects of data protection law (De Hert and Gutwirth 2003, 2006), but also by freedom of conscience and speech, physical integrity, etc.

But what about 'identity' related *claims*? What about the claims e.g. for recognition of someone's identification with a group, someone's 'being part'? Or claims relating to an administrative or civil status? What about positive actions that can be expected from the State? Legal practice shows that human rights and liberties make only sense in interactions: they all have a social dimension, they all are an essential part of the organization of collective life, they all have a public dimension. According to the European Court of Human Rights the individual must be provided the necessary material conditions for the real enjoyment of his liberties and rights. This is known by lawyers as the 'positive obligations' of states, which were inferred from negatively formulated freedoms and rights: on a number of occasions the court consequently stated that the abstention and non-interference of the state in a liberty must be complemented by the taking of positive measures that empower the individual and give substance to his liberty to participate and to adhere to causes, to protect him against exclusion, illegitimate steering of his conduct and discrimination.

In other words, legal practice -the judges- can constructively cope with the many aspects at stake under the heading of 'identity', and this, particularly through the protection of privacy understood as the protection of self-determination and autonomy, as has been defended by the Strasbourg Court in cases such as *Pretty v. UK* of 29 April 2002 or *K.A. & A.D. v. Belgium* of 17 February 2005. Furthermore, in case of failure or slowness on the part of the judges, the legislators might feel called to intervene on topical issues, in order to deal with particular problems, such as e.g. the processing of personal data, and in the future, profiling and why not, the processing of data *tout court*.

Conclusion

The concept of 'identity' offers little hope, even when it is subtly and dynamically conceived. My reasons for this scepticism are clear. On the one hand, collective identities are always constraining reductions, limiting the freedom of self-determination of the individual, reducing him or her to one or two of his/her characteristics. On the other, in most of its common understandings, the individual concept of 'identity' refers to something static, pre-existing, determining and even 'imprisoning' the individual. Even when such a narrow view is not taken and when the concept of individual identity is more subtly and dynamically conceived, I persist, because then the word 'identity' is oddly chosen, and at least confusing.



Indeed, 'identity' is not exactly the first word that comes to mind to describe a never-ending interactive, unconstrained, highly complex and pragmatic process of construction and reconstruction of the self and its place in the many networks and societies of our lives. To put it bluntly, there might well be no worse concept than 'identity' to express this process.

Indeed, we humans are 'identifiable' throughout our lives or when we physically move. We are - so the legal and political systems want - 'subjects' in the sense that we are subsistent/persistent and identifiable as material and bio-chemical articulations of a body and a consciousness. From the outside, from the point of view of the state³, I can be identified in time and in space, and as a result, I can be held liable for what I did yesterday and the political and legal system will consider me as the same 'person' in time and space. But I do not think that this aspect says something about my 'identity' at a certain place and time: I might well be identifiable, but such identification doesn't make my 'identity' and my 'belonging', let alone my 'becoming'. If I carry a Belgian identity card, I will indeed be identified as a Belgian, but to me this is just an access key to rights, public sector facilities and many other things, which I cheerfully carry in the wallet in my back pocket.

References

Carbonnier J. Flexible droit. Textes pour une sociologie du droit sans rigueur. 8th ed. Paris: L.G.D.J.; 1995. 441.

Cohen S. Visions of social control. Crime punishment and classification. Cambridge/Oxford: Polity/Basil Blackwell; 1985, 325.

De Hert, P. A right to identity to face the Internet of Things, 21 p. at http://portal.unesco.org/ci/fr/files/25857/12021328273de_Hert-Paul.pdf/de%2BHert-Paul.pdf. Also on the CD of Commission Nationale française pour l'UNESCO, Ethique et droits de l'homme dans la société de l'information. Actes, synthèse et recommandations, 13–14 septembre 2007, Strasbourg. 2008.

De Hert P, Gutwirth S. 'Making sense of privacy and data protection. A prospective overview in the light of the future of identity, location based services and the virtual residence' in Institute for Prospective Technological Studies - Joint Research Centre, Security and Privacy for the Citizen in the Post-September 11 Digital Age. A prospective overview, Report to the European Parliament Committee on Citizens' Freedoms and Rights, Justice and Home Affairs (LIBE), IPTS-Technical Report Series, EUR 20823 EN. 2003. p. 111–162.

De Hert P, Gutwirth S. 'Privacy, data protection and law enforcement. Opacity of the individual and transparency of power'. In: Claes E, Duff A, Gutwirth S, editors. Privacy and the criminal law. Antwerp/Oxford: Intersentia; 2006. p. 61–104.

Deleuze G. 'Contrôle et devenir' and 'Post-scriptum sur les sociétés de contrôle' in Pourparlers. 1972–1990. Paris: Minuit; 1990. p. 227–47.

Despret V, Gutwirth S. 'L'affaire Harry', Terrain. Revue d'ethnologie de l'Europe, to be published; 2009. EC. From RFID to the Internet of Things; Pervasive networked systems. (DG Information Society and Media), 2006, 32p (via ftp://ftp.cordis.europa.eu/pub/ist/docs/ka4/au_conf670306_buckley_en.pdf); 2006.

Ellul J. 'Sur l'artificialité du droit et le droit d'exception', I. Archives de philosophie du droit, nr 1963:8:24–7.

³ 'We are born subject. From the moment of our birth we are subject. One mark of this subjection is the certificate of birth. The perfected state holds and guards the monopoly of certifying birth. Either you are given (and carry with you) the certificate of the state, thereby acquiring an *identity* which during the course of your life enables the state to identify you and track you (track you down); or you do without an identity and condemn yourself to living outside the state like an animal (animals do not have identity papers).' J.M. Coetzee, *Diary of a bad year*, Harvil Secker, London 2007, p. 4



Foqué R, 't Hart AC. Instrumentaliteit en rechtsbescherming. Grondslagen van een strafrechtelijke waardendiscussie. Arnhem/Antwerpen: Gouda Quint/Kluwer; 1990. 501.

- González Fuster G, Gutwirth S. 'Privacy 2.0?', Revue du droit des Technologies de l'Information, Doctrine, 2008;349–359.
- Gutwirth S. Privacy and the information age. Lanham/Boulder/New York/Oxford: Rowman & Littlefield; 2002. 158.
- Gutwirth S. 'Le droit à l'autodétermination entre le sujet individuel et le sujet collectif. Réflexions sur le cas particulier des peuples indigènes'. Revue de droit international et de droit compare 1998a;1:23–78. 1998/1.
- Gutwirth S. 'Vriendschaps niet-recht. Ofte: *De l'amitié comme mode de vie'*. In: Raes K, editor. Liefde's onrecht. Het onmogelijke huwelijk tussen liefde en recht. Gent: Mys & Breesch; 1998b. p. 211–20. Tegenspraak Cahier nr. 18.
- Hildebrandt M. 'Profiling and the Identity of the European citizen' In: Hildebrandt M, Gutwirth S, editors. Profiling the European Citizen. Cross-disciplinary perspectives. Springer; 2008. pp. 303–326.
- Hildebrandt M, Gutwirth S. (eds.)Profiling the European citizen. Cross disciplinary perspectives. Dordrecht: Springer Science; 2008. 373.
- Lemmens K. 'Sic transit gloria mundi. Om vergeten en vergaan in het recht'. In: Parmentier S, editor. Jaarboek 2000–2001 van het ICM. Antwerp: Maklu; 2002. p. 45–70.
- Marguénaud J-P. 'La personnalité juridique des animaux', Recueil Dalloz. Chronique 1998;20:205-11.
- Mordini E, Ottolini C. 'Body identification, biometrics and medicine: ethical and social considerations'. Ann Ist Super Sanità 2007;43(1):51–60.
- Prins JEJ. 'Een recht op identiteit'. Nederlands Juristenblad. 2007;82(14):849.
- Serres M. Le Tiers-Instruit. Paris: François Bourin; 1991. 249.
- Serres M. 'Préface: appartenance et identité'. In: Authier M, Lévy P, editors. Les arbres de connaissance. Paris: La Découverte; 1992. p. 7–15.
- Stengers I. La vierge et le neutrino. Paris: Les empêcheurs de penser en rond; 2006. 283.
- Thomas Y. 'Le sujet de droit, la personne et la nature'. Le débat, n°. 1998;100:85-107.
- Touraine A. Qu'est-ce la démocratie? Paris: Fayard; 1994. 297.
- Tulkens F. La Convention européenne des droits de l'homme comme un instrument vivant. Les développements récents de la jurisprudence de la Cour européenne des droits de l'homme, Inaugural lecture 'VUB Chair' (VUB Leerstoel) 2006–2007, via http://www.ies.be/vubleerstoel, last consulted 6 October 2008.
- Veyne P. L'inventaire des différences. Leçon inaugurale au collège de France. Paris: Seuil; 1976. p. 62.
- Warner J. 'The right to oblivion: data retention from Canada to Europe in three backward steps'. University of Ottawa Law & Technology Journal 2005;2:75–104.
- Wright D, Gutwirth S, Friedewald M, Punie Y, Vildjiounaite E. Safeguards in a World of ambient intelligence. Dordrecht: Springer Science; 2008. 291.

