# The Nordic national ID tradition: a guidepost for the future or a relic from the past?

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Synopsis: This short paper reviews the Nordic national ID tradition, the research that I and my students have carried out on it over the past few years, the future of the five national systems, the fascinating issue of openness, and where I would like research to focus next.

## 1. Introduction

From the 1940s to the 1960s, all five Nordic countries created similar national registries and national identification number systems for their residents. Together these continue to form a coherent Nordic ID model. Yet the differences among the five systems have become more pointed over the years. All five systems are currently under pressure to adapt to technological and social changes, and in some cases the exhaustion of their number spaces.

The key features of the traditional Nordic ID model, similar across all five countries, are:

- (1) A central national register lists key data for each person, such as birthdate, address, and ID number.
- (2) The ID number contains the birthdate. It has a prominent role as a means of identifying oneself and asserting one's status in the system.
- (3) There is relatively open access to the national register data and a relatively open (though variable) attitude towards disclosure of the ID number.
- (4) Historically, Nordic residents have mostly not carried an official identity card. The role of centrally administered authentication tools or physical tokens of identity has been limited.

The Nordic countries and their registries and ID numbers		
Country	National registry	National ID number
Iceland	Þjóðskrá	kennitala
Norway	Folkeregisteret	fødselsnummer
Denmark	Det Centrale Personregister	CPR-nummer
Sweden	Skatteverket (> Folkbokföring)	personnummer
Finland	Väestötietojärjestelmä	henkilötunnus

One of my goals over the past decade has been to make sure that reliable, well-contextualized information on the history of each ID number is available publicly and openly in English. In 2010 and 2013 I published articles on the Icelandic ID number (Watson 2010, 2013). After I began teaching in Norway I encouraged master's students to work on other systems, so we now have profiles of the Norwegian ID number (Frestad 2017) and the Finnish ID number (Wessman 2018).

We have not yet studied the Danish ID number systematically. Karl Jakob Krogness made a useful review of Danish ID traditions (Krogness 2011), and there is also a considerable amount of documentation on the website of Det Centrale Personregister (www.cpr.dk). Even so, I have a poor understanding of the way the Danish number is used on a daily basis.

Our knowledge of the Swedish number is unsatisfactory. An article on it in English, though widely cited, presents only limited information (Ludvigsson et al. 2009). A longer report is only in Swedish and oriented somewhat differently from the work that I and my students have done (Folkbokföringsuppgifter hos arkivmyndigheterna, 2004). Before writing this article, I interviewed an anthropologist living in and specializing in modern Sweden to get a better sense of how the number works in everyday life.

We have learned a lot, but there remain many gaps in our knowledge, and I am very aware of how much I do not know.

# 2. The systems' fitness for the future

In the early 1990s, the Nordic countries were still culturally and economically isolated and fairly homogenous. The idea of putting a database on a CD (and accidentally leaving it on your seat in the train) was very new. The Internet was something that only a few computer science experts really understood. Smartphones and Facebook were only a twinkle in designers' eyes.

In 2019, the Nordic countries are all part of the EU or the EEA and subject to laws and directives from Brussels. A sizable chunk of their population is of foreign origin. Most people use the Internet and interact with large databases every day. They carry smartphones and upload data to web sites like Facebook.

Among the social changes taking place are the digitization of many activities and records, the mainstreaming of the ability to change gender, swift advances in biometrics, and increased legislative attention to data protection. Meanwhile, in some cases the number space in which the IDs were created is becoming exhausted.

Against this background, I would not be surprised if the "traditional" Nordic ID model begins to be seen as quaint.

At the same time, some key elements of the Nordic ID model look likely to persist, such as the prominence of the ID number and its encapsulation of the birthdate.

The governments in both Norway and Finland have spent a considerable amount of time in the past five years reviewing their ID systems and proposing changes for the future. At least as far as the ID number itself is concerned, though, recent changes proposed in Norway have been incremental rather than revolutionary (Frestad 2017, section 7.2).

The five countries do not formally coordinate their ID practices and these could well diverge more than converge in the future. On the other hand, if outside pressures or general trends act in the same way on all five countries, we might see continued parallel developments.

As more and more countries – from Germany to India – introduce coordinated national personal numbering schemes, the Nordic countries appear less and less as an area with distinct ID practices.

# 3. Openness

In the rest of this paper I will focus on the history and future of one of the most fascinating aspects of the Nordic ID model: the question of whether each person's identifying number should be open and publicly accessible, or should be a kind of secret or at least a half-secret.

Keep in mind, to start with, that in most if not all OECD countries some information about people, at least about adults, is generally open in practice. Names and addresses are available either from publicly maintained registers or at a small cost from privately maintained ones. This openness can, if desired, extend beyond name and address to cover other categories of information. Traditionally, in the twentieth-century Nordic world, personal ID numbers were in this open sphere. Today, the degree to which they are open varies from country to country.

# 3.1 The Nordic openness landscape

When personal ID numbers were introduced in the Nordic countries, they were as far as I can tell not thought of as something that people had to keep secret. Since birthdates formed the longest string of numbers in the ID, and Scandinavians tend to be very open about their ages, it was a short step to an open attitude towards the ID number.

The openness of the national registries and the ID number offered protection against the misuse of an identity. Residents were required to keep their address updated in the national registry. Corporations could (and did) purchase access to the national registry, including regular updates. The details of important transactions were confirmed with paper statements mailed to people's registered home address. This helped ensure that no one could do something in someone else's name without them finding out about it.

Today, the numbers are less open. They range from "very open" in Iceland to "slightly open" in Finland and Norway. In Iceland, bank websites offer search interfaces showing everyone's name, address, and ID number (as bank transfers must include the recipient's ID number). Icelanders regularly state their identity by giving their number and do so with little hesitation. Essentially, in Iceland, a person's number is treated little differently than their name.

Sweden appears to be the next-most-open about use of the ID number. While there is no longer a publicly accessible website listing Swedish residents' numbers, there are several privately-run ones which do so (such as hitta.se), charging a modest subscription fee which also allows access to other information. Corporations can purchase access to the national registry, which allows them, among other things, to update customer addresses automatically. When university teachers receive lists of the students in their classes, the ID numbers are included, but it is no longer customary for teachers to post lists of ID numbers and final grades in public places. ID numbers are not required for bank transfers, which in any case increasingly use a mobile telephone number to identify the intended recipient.

In both Norway and Finland, a person's ID number is, technically, public information (according to the law). Practically, though, Norwegians and Finns tend to hold their numbers rather closely and to avoid disclosing them except when truly needed or required. (Frestad 2017, sections 5.6.5, 6.4, 7.1.3; Wessman 2018, sections 4.3.3-4.3.4.)

# 3.2 Laws, fears, and everyday practices

In 2007, a governmental working group report on Norwegian identity practices was issued under the direction of national registry official Håkon Olderbakk, called *Utveksling av grunndata på personinformasjonsområdet*. The report makes very interesting reading. On the question of openness, it observed: "There is a general impression that the birth number is confidential. Most people believe that the only people who should be informed of it are the person involved, public authorities, and anyone who you happen to have to give the number to." However, in fact, "the birth number ... is publicly accessible and ... anyone can find it out, without having to state any special need." The report comments that "This gap between actual fact and individuals' beliefs creates an awkward situation." (Section 6.5.2.)

This description roughly approximates the situation in Finland as well.

Why did Norway and Finland develop in this direction, of effectively "closing" the legally open ID number system? My students' research shows that one of the factors that precipitated this development in Norway and Finland was the widespread use of the number as an authenticator in both countries (Frestad 2017, sections 5.6.6, 6.8; Wessman 2018, section 4.3.4).

The Norwegian data protection authority evidently sensed the design conflict here, and in 2007 tried to get organizations to stop using the ID number as an authenticator. Still, though, in 2013, the authority recommended that Norwegians give out their number only when truly necessary for secure identification (Frestad 2017, sections 5.6.5-5.6.6). Thus the authority discouraged Norwegians from seeing the number as a secret, but did not promote seeing it as open either.

I think the perception that an ID number is a valuable secret, and the concomitant attachment of value to it, is self-reinforcing. The more people believe that the number is secret, the more it is treated so, and imbued with value. And when an individual is in any doubt about whether their disclosures are valuable to others, they of course stay on the safe side.

So once a country with open ID starts to go down the road of considering it closed, it is difficult to erase people's sense of fear about giving out their numbers. After all, if everyone in town always locks their door, who wants to be the first one to leave theirs ajar? Understandably, it is quite difficult to put the openness genie back into its bottle.

Still, the Norwegian working group report recommended trying to do exactly that. The report advocated a move towards a Swedish level of openness. The report's authors even placed a copy of Håkon Olderbakk's passport photo page on the report cover, to demonstrate its belief in the value of open ID (for further discussion see Frestad 2017, section 7.1.3).

The report's authors understood that, paradoxically, keeping the ID number secret may make it *more* susceptible to abuse rather than less. If you suspect that an ID number is being misused and actually belongs to someone else, but there is no public list of names and numbers, there is no way to evaluate your suspicion. (This is the same argument that was made by those who spoke out against the recent closure of the United States Social Security death index.)

<sup>1 &</sup>quot;Det er en generell oppfatning om at fødselsnummeret vårt er hemmelig. De fleste tror at det kun er personen selv, offentlig myndighet og dem du eventuelt selv måtte gi fødselsnummeret til som vil ha kjennskap til det"; "fødselsnummeret ... er allment tilgjengelig og ... hvem som helst kan få kjennskap til det, uten å måtte oppgi et spesielt behov"; "Dette gapet mellom realiteter og den enkeltes oppfatning skaper en uheldig situasjon."

The hypothesis that follows is that if an ID number system is to be open, it will succeed best if there is an energetically enforced policy against using the number as an authenticator, and well-disseminated public information which educates users about the open nature of the number. The line between stating one's identity and proving one's identity is very fine, and it will always be tempting for institutions to treat the ability to produce an individual's identity number as evidence that the producer *is* in fact that individual.

# 3.3 The challenge of understanding openness

I want to better understand the history, value, and future of openness in the Nordic ID systems, both out of academic curiosity and in order to inform the design of ID systems. Among my questions are:

- (a) Why, at the beginning, did the Nordic countries design open ID systems? Did open ID systems work well? Do they still? Will they continue to do so in the future? Do they, or did they, by design, offer some protection against identity theft and data breaches?
- **(b)** Why have some observers in other countries found the Nordic approach shocking and even "ghastly"? Why, at the same time, has the Nordic approach been relatively uncontroversial in the Nordic countries? Are these systems a useful model for other countries, or a specifically Nordic cultural phenomenon?
- (c) How did open IDs then partially "close" in certain countries, such as Norway? Was it just because it became common to use the national ID number as an authenticator, lending it an aura of confidentiality and value? Was it also because of the diffusion of perspectives from other European countries? (Was it partly because the Nordic ID numbers seemed to be defined as sensitive personal information in European data protection regulations?)
- (d) Could it be that allowing an ID number to become a secret (but a paradoxical secret, which one must regularly disclose) sounds the death knell for the number's practical usefulness, by increasing the costs of defending the number and reducing the social benefit of using it? To what extent can a secret remain secret if you regularly have to tell it to other people? Is a half-open identification number game-theoretically stable?
- (e) Is it, ultimately, a fitting role for the state to create and maintain a unique identifier for every person? If so, should the number be available for use by anyone in society, including corporations? Or should its use be limited to public administration? Or to specific sectors, like the German SteuerID?
- (f) And what about the Nordic countries' focus on the number as opposed to physical tokens? Was that a child of its time an artifact of these small, homogenous societies with reliable postal services or is it still a valid approach for the future?

Discussions of ID are sometimes laden with political, ideological, or commercial agendas that may lead observers to term one solution or another "ghastly" without, perhaps, objective evidence for such judgements. Possibly the Nordic countries offer an evidence-based route to judging the fitness of openness and other aspects of ID systems. The fact that the countries' systems have diverged might allow fruitful comparisons and the creation of testable independent and dependent variables.

#### Further research

One of my high priorities for further research is creating an accessible, English-language account of the Swedish ID system. I would also like to see someone update and expand Karl Jakob Krogness's work on Denmark. If anyone knows of a Danish- or Swedish-speaking student who would like to do this and would enjoy living in Norway, I can recommend a master's program for them to apply to.

As our knowledge expands in the direction of covering all five Nordic countries, our ability to tell a coherent story about the entire region improves. I would like to find time to tell that story in an accessible way, or, more likely, to find someone else who I could help to tell it. The topic could make a fine PhD dissertation.

We have not had any external funding for our Nordic ID research, and so far it has all been done using student power and spare time. I would very much like to find institutional partners who are willing to help sponsor pan-Nordic research on ID traditions and appreciate any suggestions in that direction that you might have.

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