HUMAN IDENTITY
THE NUMBER ONE CHALLENGE IN COMPUTER SCIENCE

Philip Sheldrake
https://philipsheldrake.com
Whenever we contemplate human dignity and well-being, social inclusion and equity, economics, education, democratic process, peace and justice, whenever we contemplate many of the sustainable development goals and corresponding targets, we inevitably contemplate the question of human identity in the digital age.
“... we cannot accept technology as a substitute for taking social, cultural, and political considerations seriously. Decentralized technology does not guarantee decentralized outcomes.”

identity is … stable & unstable
cr"amete & malleable alike & different within & without singular & multiple individual & collective separate & connected whole & partial enduring & fleeting relative & absolute objective & subjective cause & effect
<table>
<thead>
<tr>
<th>COMPUTER SCIENCE</th>
<th>SOCIAL SCIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>predominantly Newtonian</td>
<td>complex</td>
</tr>
<tr>
<td>users</td>
<td>human beings</td>
</tr>
<tr>
<td>bureaucratic heritage</td>
<td>understanding community / society</td>
</tr>
<tr>
<td>hierarchical / arboreal</td>
<td>heterarchical / rhizomatic</td>
</tr>
<tr>
<td>addressing machines + resources</td>
<td>understanding relationships</td>
</tr>
<tr>
<td>computation, algorithms</td>
<td>cognition, decision making, behaviour</td>
</tr>
<tr>
<td>noun-like identity</td>
<td>verb-like identity</td>
</tr>
</tbody>
</table>

⚠ note: over-simplified!
Descartes didn’t say ‘I have a birth certificate, therefore, I am.’

Phil Windley
“Out of context, the best minds do the worst damage.”

Wes Jackson, as quoted in (Berry 2009)
Put starkly, many millions of people have been excluded, persecuted, and murdered with the assistance of prior identity architectures, and no other facet of information technology smashes into the human condition in quite the same way as ‘digital identity’. This should give anyone involved in digital identity cause to consider the emergent (i.e. unplanned) consequences of their work.
internetome

- we are already cyborg
- the digital fabric is interwoven seamlessly
- an ecological not merely technological domain

internetome.org
HUMAN

a member of the homo sapiens species

PERSONHOOD

the quality or condition of being an individual person
closely tied with legal and political concepts of citizenship
cogito, ergo sum
INFORMATIONAL / PERSON

habeam corpus, ergo sum
PHYSICAL / ANIMAL

Paradoxically, information technologists may be said to code for the physical and not the informational.
Computer science has two major influences when it comes to identity:

1. Their older society-coding cousins — lawmakers
2. Their heritage of addressing computers, documents, and “things”, and authenticating the credentials to do so (IAM).

At pervasive scale, these are tragic influences by themselves in the context of the human condition, human flourishing, and society.
“I am not a thing - a noun. I seem to be a verb, an evolutionary process - an integral function of the universe.”
Life uses information to organize itself.

It’s the medium of organizing.

Information is signal and context to identities in relationships.
Relationships are the pathways for organizing, required for the creation and transformation of information, the expansion of the organizational identity, and accumulation of wisdom.

They are formed with information exchange between identifiable entities in identifiable organizings.
Identity is the sense-making capacity of organizing.

Narrative in nature, identities assemble in relationships involving and producing interpersonal data / information.
Identities are immanent in the relationships immanent in information exchange, such exchange modulated by identities.

→ a continuous flux ←

→ symmathesey ←
There was a problem connecting with humanity.
The system is unresponsive to the separation of concerns design principle. Check your principles and try again.
generative identity — digitally mediated and augmented human identity approached primarily for psychological, sociological, and ecological health.
<table>
<thead>
<tr>
<th>noun-like</th>
<th>verb-like</th>
</tr>
</thead>
<tbody>
<tr>
<td>law</td>
<td>philosophy</td>
</tr>
<tr>
<td>computer science</td>
<td>psychology</td>
</tr>
<tr>
<td></td>
<td>sociology</td>
</tr>
<tr>
<td></td>
<td>theology</td>
</tr>
<tr>
<td></td>
<td>cultural studies</td>
</tr>
<tr>
<td></td>
<td>anthropology</td>
</tr>
<tr>
<td></td>
<td>ecology</td>
</tr>
<tr>
<td></td>
<td>linguistics</td>
</tr>
<tr>
<td></td>
<td>history</td>
</tr>
<tr>
<td></td>
<td>political science</td>
</tr>
<tr>
<td></td>
<td>archaeology</td>
</tr>
<tr>
<td></td>
<td>gender studies</td>
</tr>
<tr>
<td></td>
<td>human geography</td>
</tr>
<tr>
<td></td>
<td>art</td>
</tr>
<tr>
<td></td>
<td>architecture</td>
</tr>
<tr>
<td></td>
<td>design</td>
</tr>
<tr>
<td></td>
<td>economics</td>
</tr>
</tbody>
</table>
The qualities listed describe the system in which the system is deployed — i.e. the one that actually matters — not just the technical system alone.
We’re social animals.

Unsurprisingly, the vast majority of personal data is in fact interpersonal data.
They call this the trust triangle, but that’s disingenuous.

Trust isn’t required in deterministic processes.

Trust is bypassed, which is concerning given that trust is a foundation of human community and society.

And what if your situation doesn’t coincide neatly with where the system thinks you should be?
Privacy by Data Minimization

The collection of personally identifiable information should be kept to a strict minimum.

The exchange of contextual information (characterising the situation) is constrained.

Agency — a capacity contextualized structurally, both temporally and relationally — is constrained.

Inequality
Unequal access to opportunities

Equality?
Evenly distributed tools and assistance

Equity
Custom tools that identify and address inequality

Justice
Fixing the system to offer equal access to both tools and opportunities
I do have a criminal record but please allow me to explain.

I nearly got all the way to graduating with flying colours, but both my parents died in the final semester.

I had a great reputation at my last job, it’s just that my line manager and I fell out at the end for reasons I cannot talk about.

My former housemates rate me antisocial, but it’s nothing more than introversion.

Yes, I struggle with punctuality, but please know that I’m also a carer.
generative identity:

digitally mediated and augmented human identity approached primarily for psychological, sociological, and ecological health.

https://generative-identity.org