

EDWARD HASBROUCK

**The Airport of the Future
Is the Airport of Today**

CCRC/IP-Asia

28 November 2022

The passenger journey of tomorrow

Integrated identification to create a seamless journey



A case study in public-private surveillance partnership.

The Airport of the Future – Today

1. The context: The evolution of air travel since 9/11.
2. What's changed at airports since the pandemic?
3. The principles: Surveillance and control by design.
4. The methodology: Embedded facial recognition.
5. The airport as actor: Its nature, role, and motives.
6. The driving force: The malign convergence of government and commercial surveillance interests.

Air travel changes since 9/11:

1. ID to fly
2. Logging of lifetime travel history
3. Government acquisition of copies of airline reservations (Passenger Name Records, PNRs)
4. Permission-based control of air travel
(Default changed from “Yes” to “No”)
5. “Pre-crime” predictive fly/no-fly decision-making

Decision-making since 9/11:

1. Crisis mode / war footing: Act first; explain later.
(Deployment first; policy debate later.)
2. Secrecy stifles policy debate and shuts down critics.
("If you knew what we knew, you'd approve of it.")
3. Privacy as an afterthought.
(Antithesis of privacy by design.)
4. Policy lags practice – oversight always playing catch-up.

Airports as “Big Infrastructure”

1. New terminal at major airport: US\$1+ billion
2. 5-10 year (or more) lag from planning to entry into service.
(“New” airports reflect decisions years in the past.)
3. Financing most often by revenue bonds. (Airport operator is committed to generating enough revenue to pay off debt.)
4. By the time questions are raised, financial commitments have been made and decisions have been set in concrete and steel.

Travel industry models for surveillance and tracking of individuals' movements in commercial spaces:

1. Casinos and casino-hotel complexes.
2. Theme parks.
3. Music festivals.

Pandemic as pretext: “Contactless” facial recognition – but you have to remove your mask.



What's next?





**BIOMETRIC
TECHNOLOGY**



**ARTIFICIAL
INTELLIGENCE**



**BIG
DATA**

**REGISTER ON
SMARTPHONE**



**Opt-in registration for:
Airport
Airline
Government
Taxi
etc**



CHECK-IN FACIAL RECOGNITION TECHNOLOGY



DEPARTURE CONCOURSE



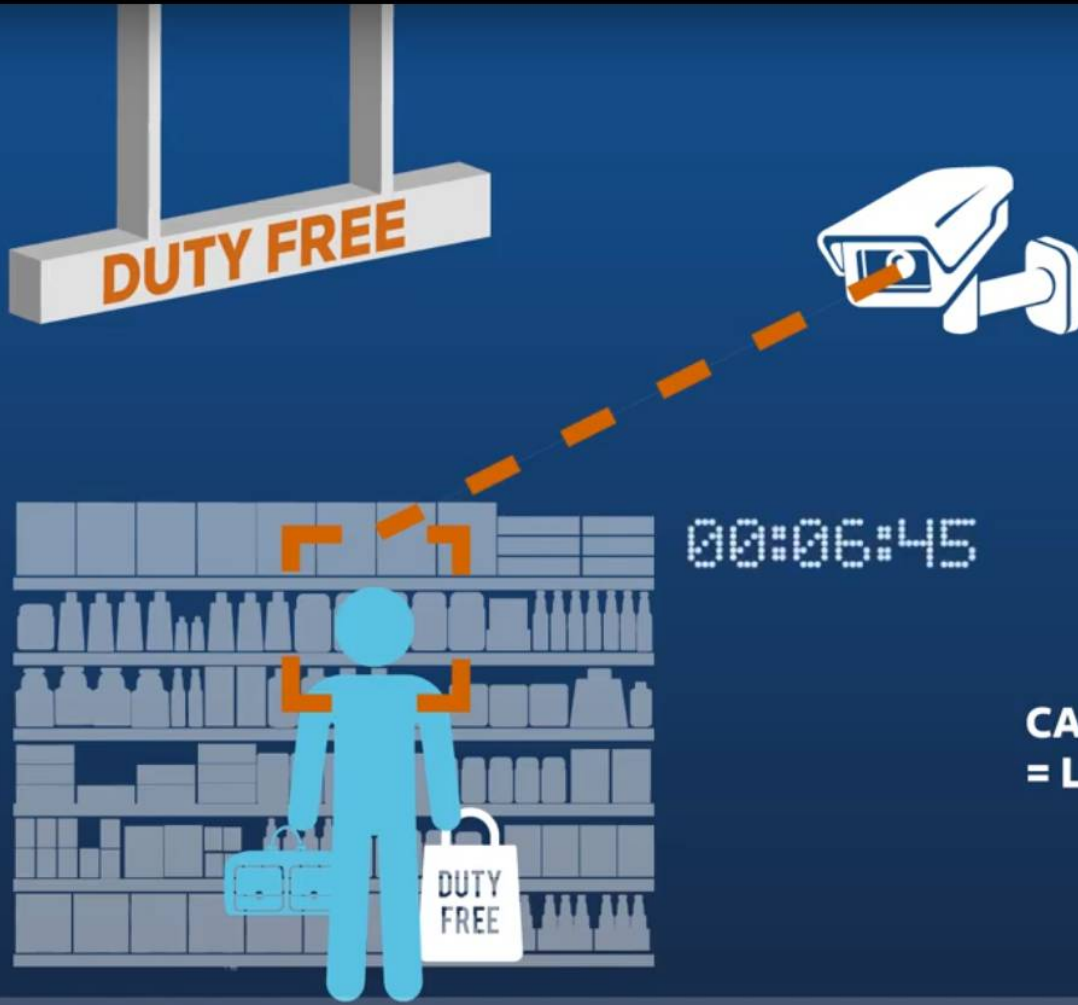
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**CAMERAS + FACIAL RECOGNITION
= LOCATION & TIME REGISTERED**

Play (k)

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Scroll for details

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NO SHOW?

PERSON LOCATED



**Airline
staff**

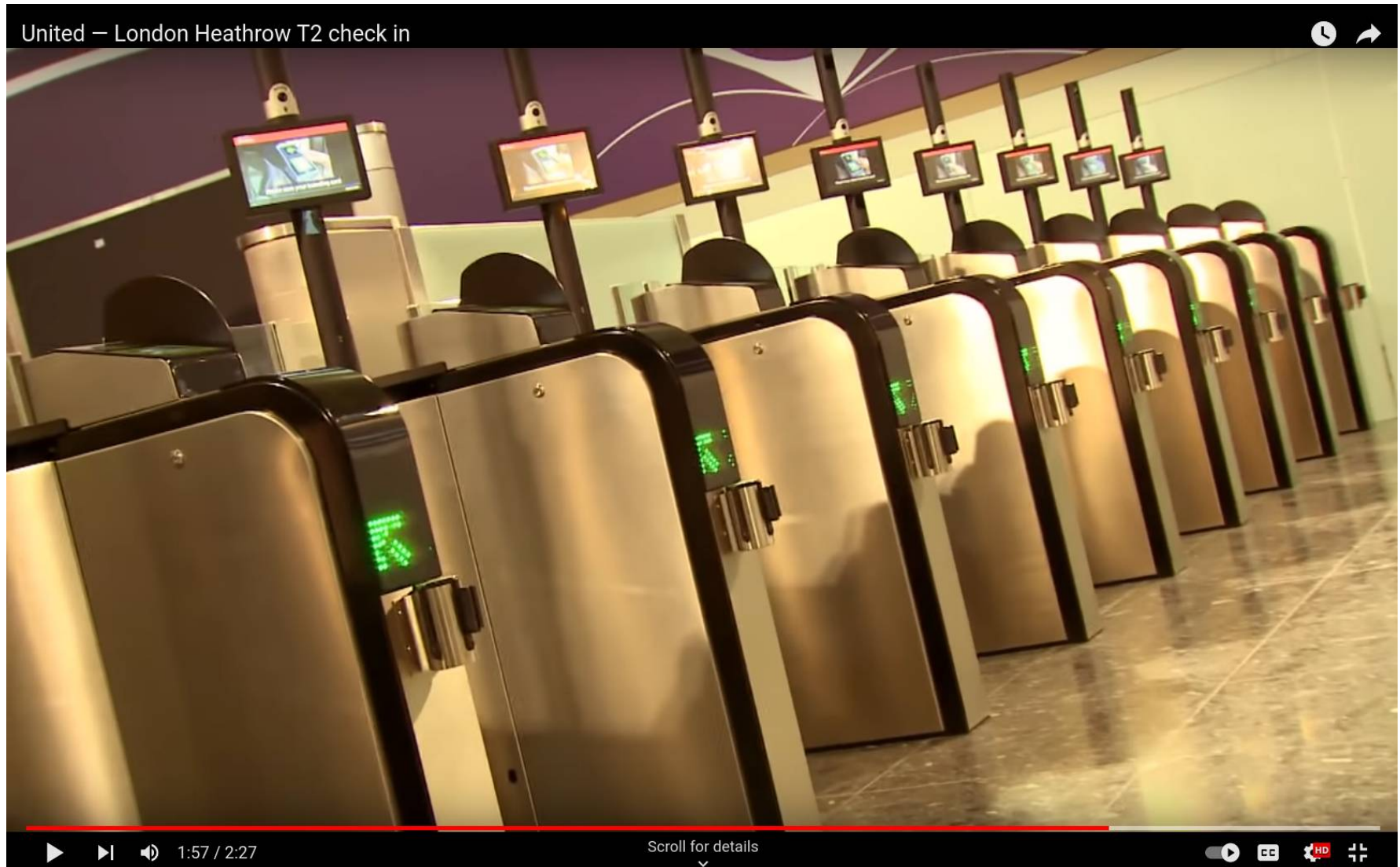


Key features of future airports:

1. In new airports and terminals, shared facial recognition infrastructure will be provided by the airport as a common-use service for all tenants (airlines, government agencies, etc.), like electricity, water, lighting, HVAC, etc.
2. When the walls have eyes, you can't "opt out" or pass through the airport without being tracked.
3. Once data is pooled, it's almost impossible to know how or by whom it has been used. (N.B. there are no access logs.)

Are we there yet?

Heathrow Airport, Terminal 2 (2014)



Heathrow Airport, Terminal 2 (2018): Where have the cameras gone?

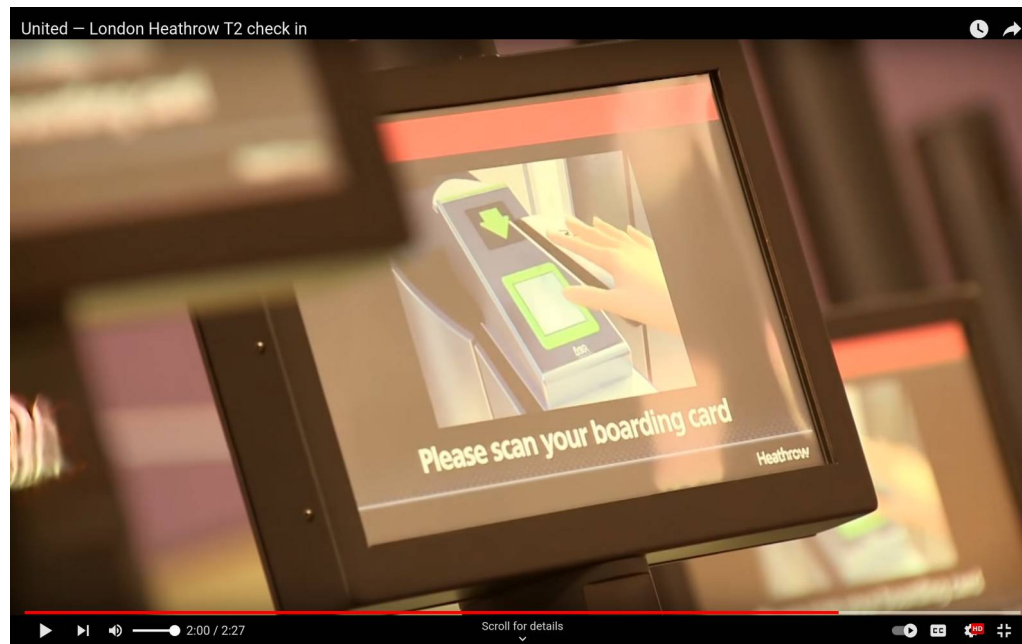






“Please remove your face mask.”

(Only those people whose faces can't be photographed are told that other peoples' faces are being photographed.)





~~Notice~~

~~Consent~~

~~"Opt Out"~~

If you opt out of facial recognition when you arrive in the USA, that goes in your permanent file.



Key players in air travel surveillance:

1. Airlines
2. Governments
3. Computerized Reservation Systems (CRSs)
4. Airports
5. Vendors and contractors

Airports as actors: state power + profit motive

1. Public or private?
2. Little accountability.
3. Large, long-term investment decisions.
4. Fiscal autonomy / profit motive.
5. Collaboration with industry and government
(especially with law enforcement agencies).

Malign convergence of interest between government and industry:

Industry goals:

1. Automation / labor and cost savings.
2. Collect big data for revenue optimization.
3. Fast, smooth passenger throughout (more flights/gate/day).
4. Mimimize costs of exception processing.
5. Minimize passengers' fears. "Happy flow."
6. Profits for homeland-security industrial complex of vendors

Malign convergence of interest between government and industry:

Government goals:

1. Permission-based control of movement.
(Assumption: Travel is a privilege, not a right.)
2. Collect big data for profiling and data mining.
3. Pre-crime predictive policing.
4. Move borders further away in space and time. Prevent unwanted people from arriving or making asylum claims.
5. Minimize complaints and political backlash.

Malign convergence of interest between government and industry:

Features that advance both government and industry goals:

1. Pervasive common-use surveillance infrastructure.
2. Invisible, low-friction walkthrough tracking and control.
3. Government-industry sharing of common data pool.
4. Minimize or eliminate opt-outs and exceptions.
5. Lack of judicial or legislative oversight.



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The Identity Project:
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