Disclaimer

- Christina Mulligan and I are Advisors to the ALI/ELI project on Principles for a Data Economy
- This paper emerged from our conversations about the conceptual issues involved
- We speak for ourselves, not for the ALI, the ELI, the reporters, or any other participants
Introduction
A paradox

- Tori Tortfeasor wrecks Owen Owner’s car
- Tori is liable to Owen for conversion
- Tori has violated Owen’s property rights
- Tori deletes data from Owen’s Dropbox
- Tori is liable to Owen for computer misuse
- Tori is not typically thought of as having violated Owen’s property rights
The computer is tangible personal property

But it belongs to Dropbox, not to Owen

None of the IP fields fit the facts

E.g., no copyright unless the data is original

And there is never IP liability for deletion
Our argument: data is property

- Property in a thing is possible where we can:
  - Say what the thing is (subject matter)
  - Say who owns the thing (ownership)
  - Say when thing has been misused (violations)
- Data meets all of these criteria — provided that we are careful about the details
Taxonomizing property
The logic of personal property

- Owen’s car is tangible, movable, rival, and excludable.
- Ownership flows from and protects exclusive physical control.
- Personal property torts (e.g., conversion, trespass to chattels) protect against unauthorized use, impairment, and dispossession.
The logic of real property

- Blackacre is tangible, immovable, rival, and excludable
- Exclusive physical control is still the core of ownership
- Real property torts (e.g., trespass, nuisance, ejectment) protect against unauthorized use, impairment, and dispossession
The logic of intangible property

• A domain name is intangible, rival, and excludable

• The “thing” is socially recognized, but it still obeys the logic of exclusive control — mydomain.com can only point to one website

• Conversion protects against dispossession
Intangible property and tangible things

- Intangible property is often linked to specific tangible things
  - E.g., DNS servers, corporate share ownership records, taxi medallions
- These things are *prima facie* but not conclusive evidence of ownership of the intangibles
The logic of IP: copyright

- A copyrightable work is intangible, non-rival, and non-excludable
- An author first “possesses” a work when it is fixed in a tangible medium of expression
  - Possession thereafter plays no role
- Infringement is unauthorized use
Information is different

- Information is non-rival: multiple people can simultaneously possess the same information
- Information is not naturally excludable
- Copyright creates legal excludability
- Selling a copy of the work exhausts copyright control over that copy, but not over the work
Data as property
Data as a nexus between information and object

- Owen cares about information like his family photos, his business accounts, and other data.
- These exist in multiple copies — in tangible objects like his and Dropbox’s computers.
- The information is valuable only to the extent that it is contained in at least one object.
- The objects are valuable only to the extent that at least one of them contains the information.
Control of data

• To possess data is to have control over a copy

• Nonexclusive in two senses:
  • Others may possess the object
  • Others may have control over other copies

• Cf. EU GDPR (“‘controller’ means the natural or legal person … which … determines the purposes and means of the processing of personal data”)
Data property violations: learning from trade secret

• Trade secret law protects against unauthorized use

• This is a relational tort: there is no violation if Tori independently discovers the information, or even reverse engineers it

• I.e., trade secret infringement involves improper dealings with Owen’s copy of the data

• “Improper means” imports large swaths of tort law, property law, computer-misuse law, etc.
Data property violations: beyond unauthorized use

- Trade secret, like copyright, deals only with use
- Other bodies of law prohibit dispossession and interference
- CFAA “damage” includes “any impairment to the integrity or availability of data”
- Remedies for conversion of the computer include damages for value of lost data
The common thread

- If I have control of a copy of data, the legal system allows me to exclude you from accessing my copy.
- I.e., data property protects the natural (but partial) natural excludability of data in copies.
- We can transact about the conditions under which I will give you control of a copy.
- Data property does *not* limit your acquisition or use of the information itself, as copyright does.
Implications
Resistance to property in information, pt. 1

- Many IP scholars bear the scars of the battles over new IP rights: database protection, APIs, ratings hot-news misappropriation, etc.
- They are understandably skeptical of data “property” as a source of new IP rights
- Our point is that data property is not an IP right; it more closely follows the logic of real, personal, and intangible property
Resistance to property in information, pt. 2

• Many technology-law scholars bear the scars of the battles over access to computers: clickthrough agreements, digital trespass to chattels, expansive CFAA prosecutions, etc.

• They are understandably skeptical of strong rights to control access to data on computers

• We believe that these are best understood as disputes about the scope of property rights
So why bother?

- People are already doing socially valuable transactions in data, so it would be better to be clear about what they are doing.
- Some transactions — e.g., creating security interests — really need conceptual clarity.
- Recognizing how existing “property” law sensibly applies might reduce the hydraulic pressure towards creating new rights.
Questions?