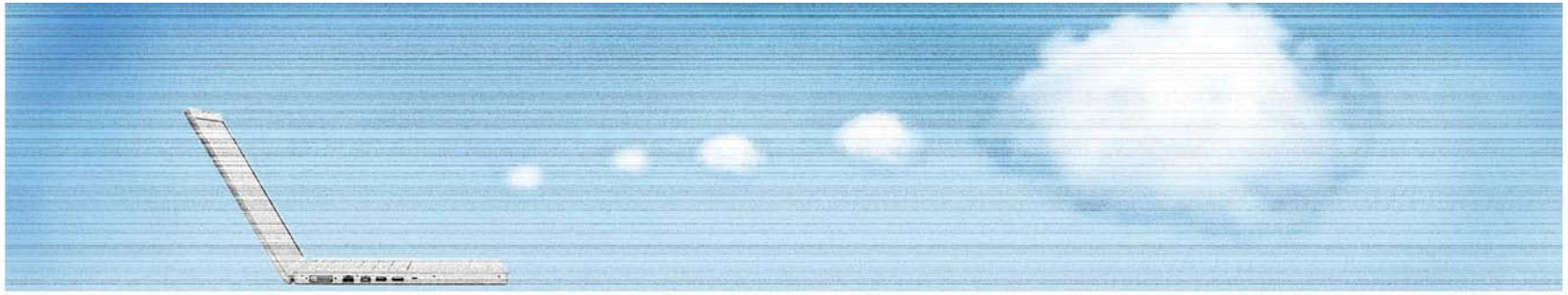

UiO : Department of Media and Communication
University of Oslo

Ethical Challenges in Information Technology

New identities – new privacies – new (research) ethics?

Dr. Charles Ess
<c.m.ess@media.uio.no>

Overview

0. Introduction + Initial Examples: Fairphone; OKCupid

1. Introduction: why it's easy, why it's difficult …

A. the nature of ethical *judgments*

B. the range of ethical frameworks: utilitarianism, deontology, ***virtue ethics***

[→ diversity of cultural / national traditions]

C. You can't always get what you want: "no-go" areas, protecting researchers…

2. Ethics in an *electrically-mediated age*: changing ethical worlds – changing selves → *changing understandings of ethical responsibility*

from *literacy-print* and (high) modern *autonomous individuals*

to "electric media," *secondary orality*, and *networked / relational individuals*.

In the electric age, we wear all mankind as our skin.

3. Relational selves and new (old) conceptions of privacy

A. *Familiar* (high) modern ethical frameworks as **presuming** *the individual* as an autonomous, moral agent

vis-à-vis *relational selves* and emerging notions of "*relational autonomy*," etc.

B. (High) modern conceptions of *individual privacy* as *positive good*

vis-à-vis (late modern) shifts toward "publicy," shared "personal space," etc.

C. **changing conceptions of privacy / *privatlivet*** → What *kind(s) of "privacy" / privatlivet?*

4. Concluding remarks: (research) ethics in the (analogue) digital age?

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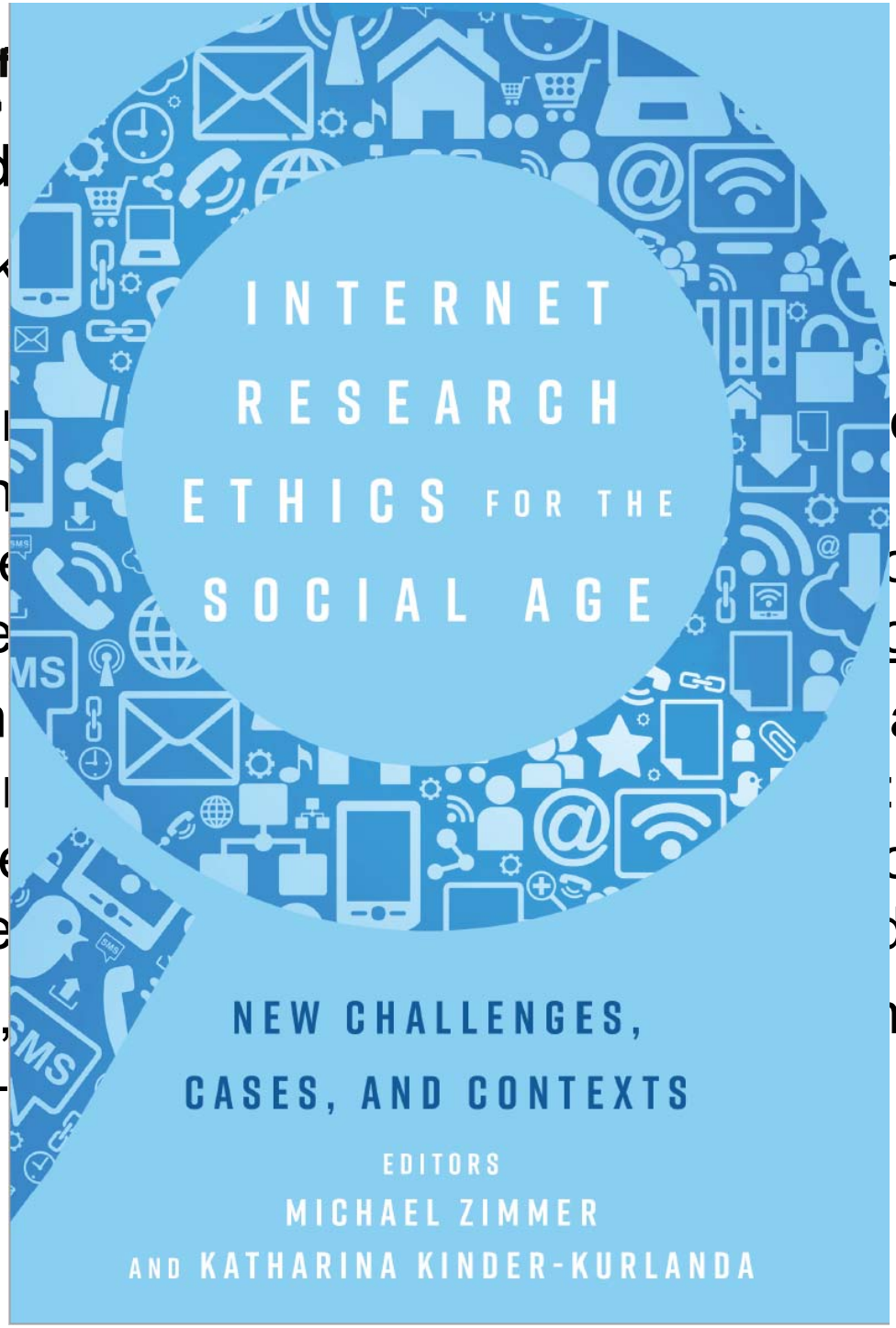
0. Introd rphone

A bit of back cs (IRE) since 2000 ...

- Ess, Chai ommittee. 2002. Eth Research: Recomme rking Committe cs.pdf
- Markham al Decision-Making a Recomme rking Committe df
- Co-Chair, mann, AoIR IRE 3.0 –

…



A better phone is a phone made better

Our phones hold a complex story of the hundreds of people who helped make it. We want to open up that story, so we can make a positive impact in how phones are made, used and recycled.

Change doesn't happen overnight. But together with our community, we're building a movement to show the demand for fair products.

Our goals

When it comes to making our phone, we're doing things a little differently.

We aim to create positive social and environmental impact from the beginning to the end of a phone's life cycle.

Long-Lasting Design ›

Fair Materials ›

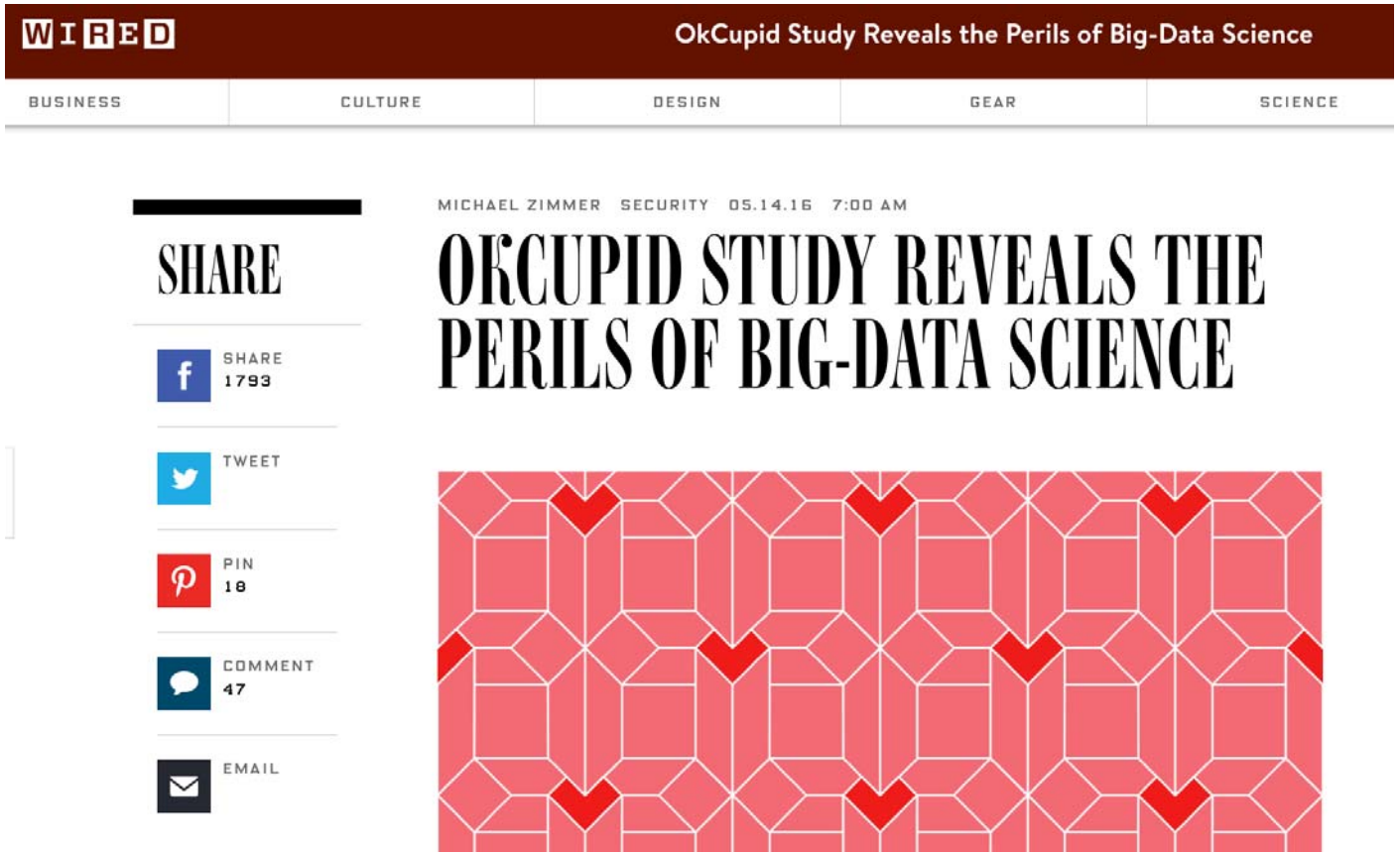
Good Working Conditions ›

Reuse and Recycling ›

http://www.theguardian.com/commentisfree/cifamerica/2011/dec/30/apple-time-make-conflict-free-iphone

0. Initial Example 2: IRE 3.0 example: the status of data

Public data … grey data: o.k. to use OKCupid?



Michael Zimmer, *Wired Opinion*, 05.14.16 <https://www.wired.com/2016/05/okcupid-study-reveals-perils-big-data-science/>

Public data, grey data

On May 8, [2016] a group of Danish researchers publicly released a dataset of nearly 70,000 users of the online dating site OkCupid, including usernames, age, gender, location, what kind of relationship (or sex) they're interested in, personality traits, and answers to thousands of profiling questions used by the site.

Methods (?):

[apparently] the researchers created an OkCupid profile from which to access the data and run the scraping bot.

Since OkCupid users have the option to restrict the visibility of their profiles to logged-in users only, **it is likely the researchers collected—and subsequently released—profiles that were intended to *not* be publicly viewable.** The final methodology used to access the data is not fully explained in the article.

Public data, grey data

When asked whether the researchers attempted to anonymize the dataset, Aarhus University graduate student Emil O. W. Kirkegaard, who was lead on the work, replied bluntly: “No. Data is already public.”

Comments?

Public data, grey data

Zimmer's comm

1). The most ir
even if someo
data analysis
never intende

2). Concerns
disappear sin
networks; rat

-- borne out by
Peter Warden'

data has been subsequently withdrawn, destroyed. **(consequential)**

Ess (deontological): two wrongs do not make a right:

Someone else breaching confidentiality, etc. does not justify your doing so, especially in the case of sensitive information that could remain harmful to some one.

Aarhus University …

1. Introduction: why it's easy, why it's difficult …

A. the nature of ethical *judgments* – determinative judgment vis-à-vis reflective judgment/*phronesis*

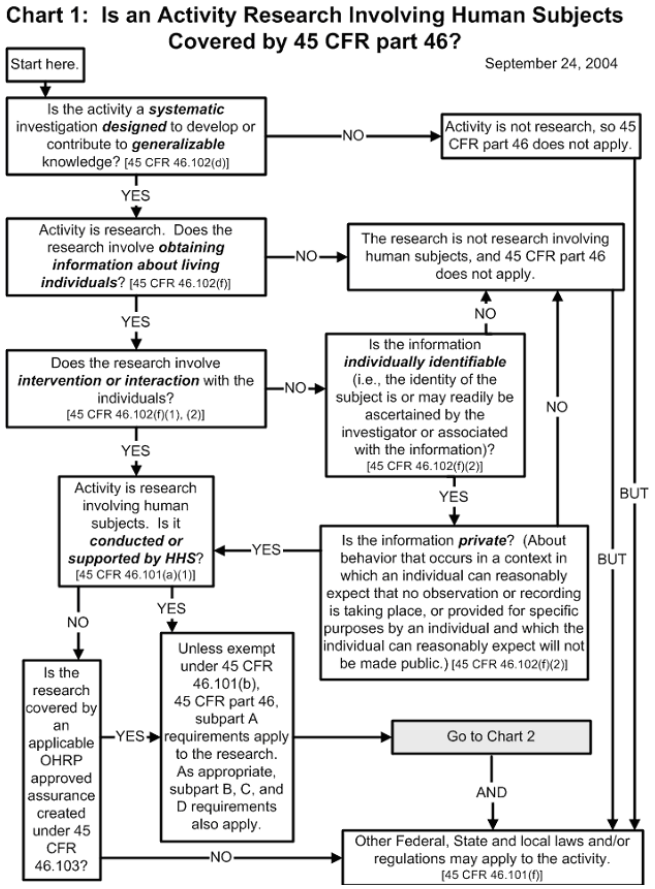
determinative, "top-down" ethical judgments that run from (more or less) accepted ***general principles*** → *specific ethical conclusion(s)*

and

reflective, "bottom-up // top-down" ethical judgments that require us <u>first</u> to discern
(from the "bottom-up") within a given, specific, fine-grained, and *incomplete* context of actors, relationships, and possible choices → what <u>general</u> ethical principles, norms, practices apply?

1. A. the nature of ethical *judgments*

determinative, "top-down" ethical judgments that run from (more or less) accepted ***general principles*** → *specific ethical conclusion(s)*



1. A. the nature of ethical *judgments*

By the same token:

Ethical Requirements for Research in the Humanities and Social Sciences (NESH)

<https://www.etikkom.no/en/In-English/Committee-for-Research-Ethics-in-the-Social-Sciences-and-the-Humanities/>

NSD: Norsk samfunnsvitenskapelig datatjeneste AS
<http://www.nsd.uib.no/>

On the one hand – it **seems** (relatively) easy …

1.A - Determinative Judgments

5. The obligation to respect human dignity

Researchers shall work on the basis of basic respect for human dignity.

Researchers must show respect for human dignity in their choice of topic, in relation to their research subjects, and in reporting research results. This implies that research processes

- **ensure freedom and self-determination** (Sections **6, 8, 9, 12, 13, 14, 15 and 19**);
- **safeguard against harm and unreasonable suffering** (Sections **7, 9, 11, 12, 13, 17 and 18**);
- **protect privacy and close relationships** (Sections 14, 15 and 16).

1.A - Determinative Judgments

10. Research licences and the obligation to report

All research and student projects that involve the processing of personal data must be reported.

The term 'personal data' refers to information that can be traced to an individual, directly or indirectly.

A person will be directly identifiable by name, personal identification number, or other unique personal characteristics. Information registered under a reference number and that refers to a separate list of names or personal identification numbers, for example, is (indirect) personal data regardless of who keeps the list of names, or where or how it is stored. People will be indirectly identifiable if it is possible to identify them through background information such as, for instance, municipality of residence or institutional affiliation, combined with data on age, sex, profession, diagnosis, etc.

→ data mining problems; importance of secure data storage - § 16

NSD NORWEGIAN CENTRE FOR RESEARCH DATA

About NSD | Contact | Norwegian pages

About NSD | Data Services | Software | eLearning | Projects

About NSD

- Research and Privacy
- Annual Report
- Staff
- Contact
- Data Access
- Norwegian Pages

Data Services

- Individual Level Data
- Regional Data
- Political System
- Institutions
- Deposit Data

Software

- NESSTAR
- NSDStat

NSD - Norwegian Centre for Research Data

NSD is situated in the city center of Bergen.
NSD is one of the largest archives for research data of its kind and provides data to researchers and students in Norway and abroad. Additionally, NSD is a resource centre, which assists researchers with regard to data gathering, data analysis, and issues of methodology,

NSD News - 1/2017

NSD News - 2/2016

<http://www.nsd.uib.no/nsd/english/index.html>

1.A - Determinative Judgments

10. Research licences and the obligation to report

NSD's main responsibilities are

- **to evaluate research and student projects relative to the provisions in the Personal Data Act and Personal Health Data Filing System Act with appurtenant regulations,**
- **to provide information and guidance to the institutions and the individual researcher and student on research and the protection of privacy,**
- **to help respondents protect their rights and**
- **to keep a systematic, public list of all treatments.**

1.A - Determinative Judgments

10. Research licences and the obligation to report

Read the fine print …

If a project is in the province of the privacy ombudsman, the ombudsman will determine whether the project is subject to the obligation to obtain a licence or to report. Scientists that have a privacy ombudsman should always report their projects to the ombudsman.

A project is to be reported 30 days at the latest prior to the commencement of data collection or time the sample will be contacted. For projects requiring notification, the administrative procedure is completed when the privacy ombudsman and project manager receive written notice that the project can be initiated.

1.A - Determinative Judgments

10. Research licences and the obligation to report.

For projects deemed to require a licence, the privacy ombudsman will submit an application to the Norwegian Data Inspectorate on behalf of the researcher or student (with a copy to the project manager). The project cannot be initiated before a licence is granted (approved in advance) by the Norwegian Data Inspectorate.

When deciding whether to grant a licence, the Norwegian Data Inspectorate will attach importance to the processing of personal data that could disadvantage individuals.

The Norwegian Data Inspectorate may issue a licence on the condition that particular conditions are fulfilled. Such conditions will be legally binding on researchers.

Scientists affiliated with institutions without ombudsman schemes shall report their projects directly to the Norwegian Data Inspectorate.

ON THE OTHER HAND …

reflective, "bottom-up // top-down" ethical judgments that require us first to discern **from the "bottom-up," i.e.,** within a given, specific, fine-grained, and *incomplete* context of actors, relationships,

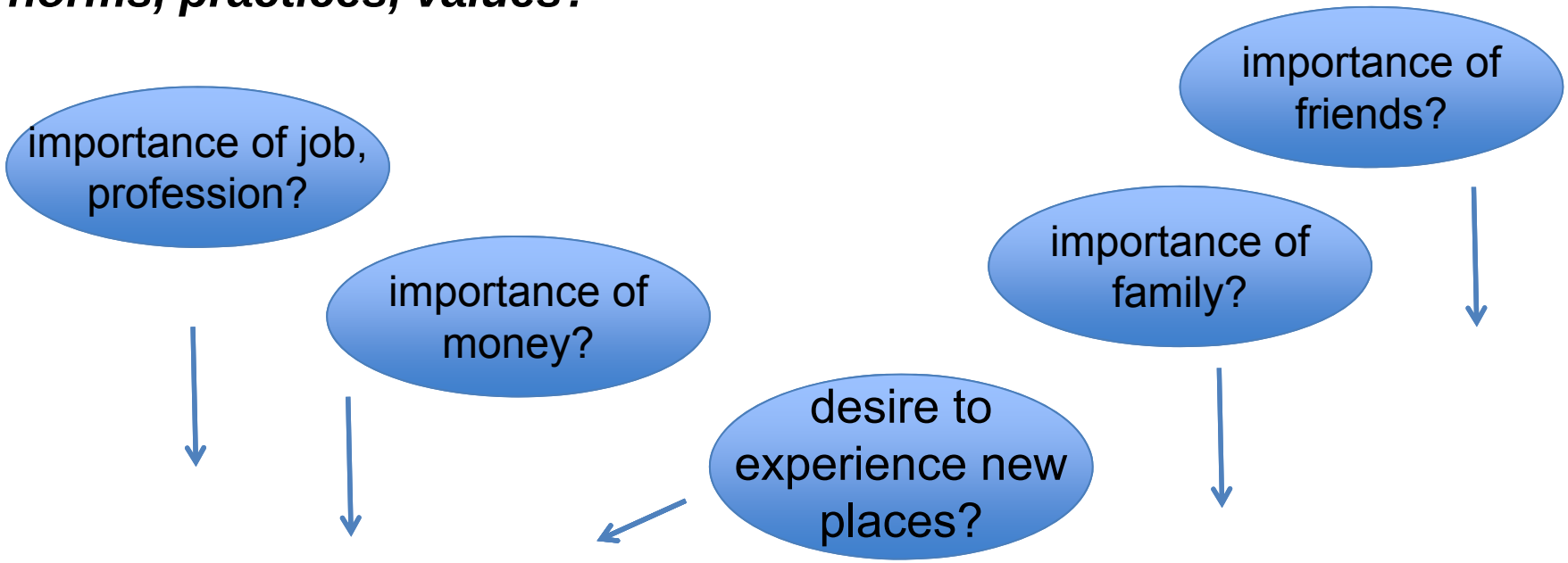
→ possible choices - difficult enough: but *contra* **determinative judgment where specific principles, norms, etc. are *given***

→ **reflective judgment must further determine** what **general ethical principles, norms, practices apply**?

Example … accept / decline a new academic position?

Attractors	Drawbacks
Better salary desirable location new research / teaching / publication opportunities …	challenges of new position - including, e.g., new language costs of moving far from family, long-time friends …

Now: which factors are more significant - in light of what general *norms, practices, values?*



Attractors	Drawbacks
Better salary desirable location new research / teaching / publication opportunities …	challenges of new position - including, e.g., new language costs of moving far from family, long-time friends …

1. A. the nature of ethical *judgments*

As **our experience** with these sorts of judgments demonstrates:

i) we **can** - with good reason, i.e., legitimately - discern

a) which general principles / norms / practices apply, and

b) in case of conflict, their relative weight / priority,

in part, precisely through a reflexive dialogical interrogation of a specific given context –

and thereby come to a "decision" – better, ***judgment*** – as to what specific choice we will make.

But this means:

ii) it is perfectly possible for different persons - or, e.g., the same person at different stages / contexts - to draw different *judgments* as to the proper course of action, e.g. "judgment calls"

iii) such judgments, moreover, may bring into play *tacit*, *inarticulate* understandings of the world and our place in it **as developed through experience and known in and through the body**

→ **"gut feeling" "what my heart tells me" …**

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(iv) This is ...ch judgments, finally, allo... **...lgments may be leg... ...d,** <u>not</u> **ethical**... ...ctive," "it's all relative," et...

Second / th...

(B) th...

(C) (i... **...cultural / natio... ...ctices, etc.**

→ **"proces...**

learnin... ...erating – questio...

This chart provides a useful starting point for internet researchers to consider ethics. Convergence of technologies and capacities continues to break down the strict boundaries between these categories. While not intended to provide answers, it promotes consideration of a range of issues and questions that may become relevant in the course of any internet related research.

Types of Data collected	Types of Venues/Contexts	Commonly asked questions about ethical practice
Interactions, behaviors, transactions • Hyperlinks • Comments or Recommendations • File or Information Sharing (file or snippet) • Forwarding /Replying • Interpersonal Interactions, conversations • Networks (e.g., maps visualizing communication flow or strength of relations between persons)	**Direct communication** (formal or informal interviews via real-time or asynchronous text, audio, or visual)	How is protection of autonomy of participant/author achieved through informed consent or protection of vulnerable persons? How can researcher ensure that author/participant understands and agrees that content or interaction may be used for research purposes? Is the communication archived or easily searchable and retrievable? Is the data subject to open data laws or regulations? How long does the third party provider or ISP preserve the data and where? Could privacy be achieved through anonymization of email content and/or header information?
	Special Interest Forums (email- or web-based conversations and archives, e.g., threaded discussion forums, chatrooms)	How do terms of service (TOS) articulate privacy of content and/or how it is shared with 3rd parties? Regardless of TOS, what are community or individual norms and/or expectations for privacy? Does the author/subject consider personal network of connections sensitive information? Is the data easily searchable and retrievable? If the content of a subject's communication were to become known beyond the confines of the venue being studied – would harm likely result? Is the conversation thread or forum perceived as public or private by the author(s)/subject(s)? How is profile, location, or other personally identifying information used or stored by researcher? Is the data easily searchable and retrievable? How is informed consent or protection of privacy achieved? How are vulnerable persons identified and protected? If non-active archives are used, how is vulnerability or harm defined and how are potential or actual subjects protected?
Production, presentation, performance • Texts (e.g., authored texts, naturally occurring discourse, interview transcripts) • Images (presented or produced by user or captured by researcher) • Video (presented or produced by user or captured by researcher) • Audio (presented or produced by user or captured by researcher) • User motions and movements (any and all activities produced or presented by user and/or captured by researcher) • Configurations or personalization of devices	**Social Networking** (e.g., LinkedIn, google+, Facebook, Myspace, Flickr, FourSquare)	How do the terms of service articulate privacy of content and/or how it is shared with 3rd parties? Does the author/participant consider personal network of connections sensitive information? How is profile or location information used or stored by researcher? Does author/participant understand and agree to interaction that may be used for research purposes? Does research purpose and design balance possible conflicts between participant and researcher perceptions of public/private and sensitive/nonsensitive? Does the dissemination of findings protect confidentiality? Is the data easily searchable and retrievable? If the content of a subject's communication was ever linked to the person, would harm likely result?
	Personal spaces/blogs (e.g., homepages, blogs, youtube, and all forms of multimedia presentation)	Could analysis, publication, redistribution, or dissemination of content harm the subject in any way? If the content of a subject's communication were to become known beyond the confines of the venue being studied would harm likely result? Does the author/participant consider personal network of connections sensitive information? Does author/participant consider the presentation of information or venue to be private or public? Do the terms of service conflict with ethical principles? Is the author/subject a minor?
Locations and movements • Physical locations (GPS) • Physical movements • Surfing behaviors	**Avatar-based social spaces , virtual worlds, and online gaming spaces** (e.g., Second Life, SIMs, MUDS/MOOS, MPORPG)	Should these virtual worlds be considered "public"? What constitutes "privacy" in such places? Should avatars be considered as persons and afforded the same protections as human subjects? Will the process of requesting consent itself cause harm? How and when should consent be sought? What requires consent? To what extent do users perceive their interactions and communication to be private in these spaces? How do Terms of Service specify researcher presence, anonymity of users, and privacy/confidentiality? To what extent and in what ways could research activities interfere with or compromise a user's play or outcomes in the game? How should researchers juggle their own multiple roles? Could data be used to identify a user's physical location and other sensitive demographic information?
Archived information • Demographic information • Bookmark collections • Discussion archives • Data banks • Transaction logs • Clickstream data • Trace data	**Commercial Web Services** (e.g., Google, AOL, Yahoo, Bing, MSN, SurveyMonkey, Cloud Storage)	What are the participant/author's expectations of privacy? Is the data easily searchable and retrievable? Is the data subject to open data laws or regulations? Does the service's privacy policy contradict ethical principles? What measures safeguard data at the site of data collection? How long will the data be stored on the servers? Does this contradict the time frame indicated by the researcher or institutional policies? What happens to the data after the researcher completes work on the service? How are the data destroyed? How will cross-border data be handled if IP addresses are considered by one country to fall under privacy regulations?
	Databanks/ Repositories	Where is the data stored? How long will the data exist in the repository? What consent is needed for subsequent data use? Does the remixing/mashing of data enable identification of individual or group identities or enable any additional risks to participants? In the case of shared data, what conditions were placed on data use by the original researcher, if any? Regardless of conditions, what ethical responsibilities may require consideration by later users? What mechanisms are in place to ensure appropriate data provenance and ownership? How will images/audio be effectively anonymized?

Created by Annette Markham as Appendix 1, AOIR Guidelines: Ethical Decision Making and Internet Research Ethics: 2012. Original document located at http://aoir.org/ethics/

1. B. ethical frameworks

Utilitarianism – ethical cost-benefit analysis: will (potential) benefits of a given choice/act/rule outweigh possible harms (=costs)? "Greatest good for the greatest number" – primary framework in U.S. – UK?

Deontology – emphasizes basic *rights* of *autonomous individuals* (including life, liberty, pursuit of property … privacy, etc.) as near-absolute; to be protected (more or less) no matter what benefits might otherwise accrue. Strongly influential in Northern Europe, Scandinavia

feminist ethics*/*ethics of care – *feeling* as much as reason is a crucial "way of knowing," especially with regard to ethics as a matter of "sustaining the web of *relationships*"

virtue ethics – what virtues (habit, practices, facilities) are requisite for good lives of *flourishing, friendship* and internal/external *harmony*? ("Eastern," **increasingly "Western"**)

→ **cultural differences**, e.g., U.K.-U.S. preferences for *utilitarianism* vis-à-vis (northern) European / Scandinavian preferences for *deontology* → ***tricky*** when doing cross-cultural research … **most obviously: EU vs. US privacy protections, regulations**

1. Ethical frameworks

UTILITARIANISM

When faced with competing possible actions or choices, utilitarian approaches apply an ethical sort of cost/benefit approach, in the effort to determine which act will lead to the greater benefit, usually couched in terms of happiness (a notoriously difficult and ambiguous concept – thus making utilitarian approaches often difficult to apply in *praxis*).

species of utilitarianism (also called *teleological* or goal-oriented theories):

> *ethical egoism*: one is concerned solely with maximizing benefit or happiness for oneself (and/or)
> *(act / rule) utilitarianism*: maximize benefit or happiness for a larger group (hence the utilitarian motto of seeking "the greatest good for the greatest number").

MIDDLE EAST

To Trump, Human Rights Concerns Are Often a Barrier to Trade

Since the terrorist attacks of September 11th, 2001, the United States government under George Bush has highlighted homeland security as one of his government's top priorities, and thus **new legislation has been implemented to fight terrorism along with the corresponding wars in Afghanistan and Iraq**. One such legislation is **the USA Patriot Act,** enacted on October 24, 2001. The purpose of this controversial legislation is to provide law enforcement with enhanced investigatory tools to aid in deterring and prosecuting terrorist acts, on American soil and abroad.[5] Critics argue **this act erodes America's civil liberties by removing checks that limit law enforcement's freedom [including rights to due process and rights to privacy].** However, proponents of the bill assert that **the Patriot Act is necessary as a measure to counter terrorism and ensure national security.**[6]

<https://atlismta.org/online-journals/0607-journal-development-challenges/the-terrorist-threat/>

NEW TWITTER POLICY ABANDONS A LONGSTANDING PRIVACY PLEDGE

BY JACOB HOFFMAN-ANDREWS | MAY 22, 2017

1. Ethical frameworks

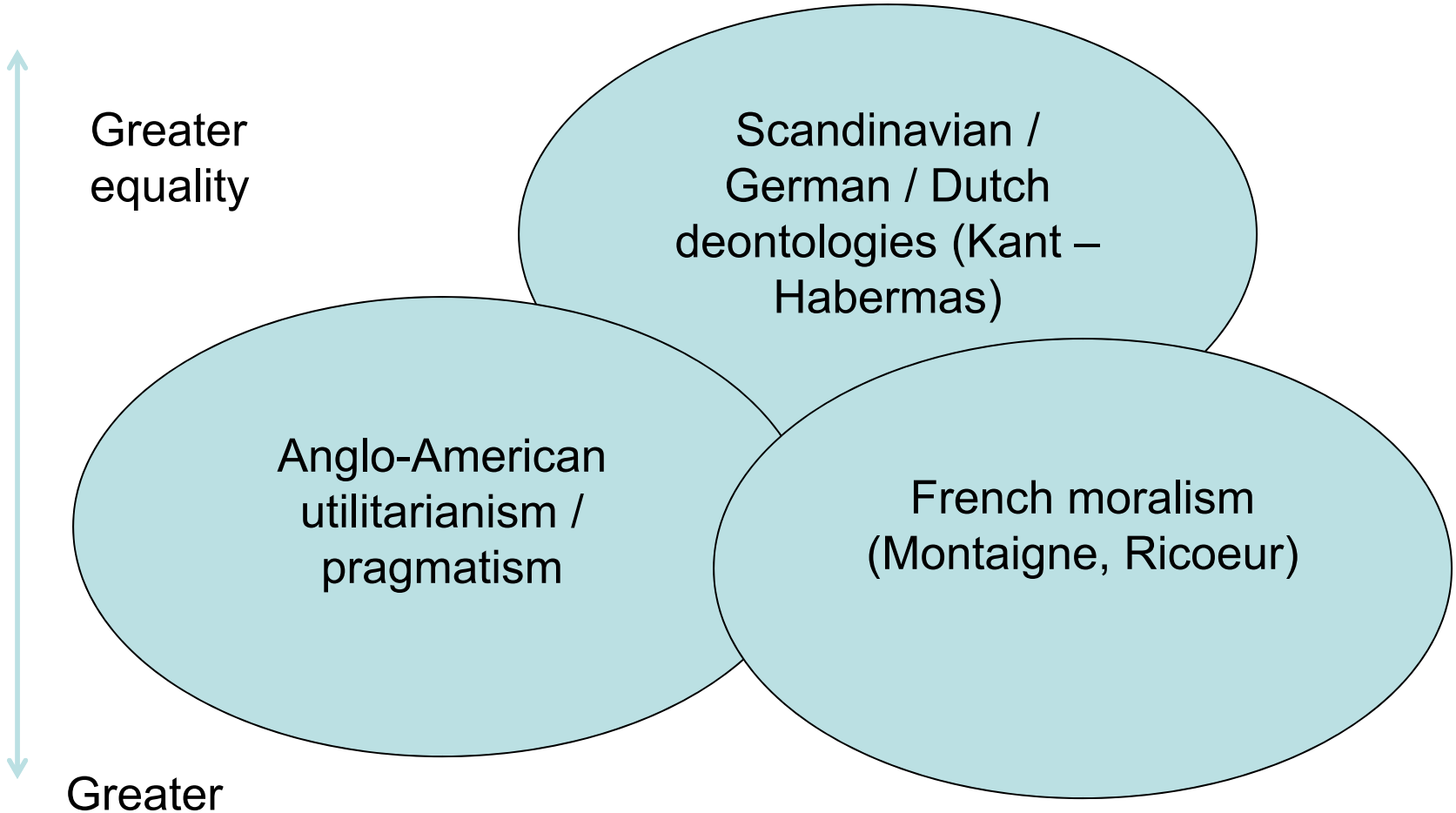
DEONTOLOGY …put[s] the emphasis on the internal character of ***the act itself***," and thus focuses instead on "the ***motives, intentions, principles, values, duties***, etc., that may guide our choices" (Johnson 2001, 42: emphasis added, CE).

Grounded in especially Kantian understandings of **the human person as a *rational autonomy*** – one capable of self-rule: insistence upon and protect the human being *qua* freedom – otherwise we are slaves … → fundamental norms / duties of **respect**, **equality** (→ modern liberal-democratic polity)

→ **language of *rights*** – including rights fundamental to Human Subjects Protections, i.e., autonomy, privacy, confidentiality, informed consent, freedom from unnecessary harm(s), etc.

→ at least **some values, principles, or duties require (near) absolute endorsement** – no matter the consequences.

→ *Multiple cultural / national ethical traditions …*



[Cf. Stahl, Bernd Carsten. 2004. *Responsible Management of Information Systems.* Hershey, PA: Idea Group.]

1. Ethical frameworks

feminist ethics*/*ethics of care –

Contra strongly [masculine?] dualistic splits between mind // body (Descartes → modern ethics)

Emphasis on **experiences of *embodiment*** in which any sense of separation between mind and body disappears:

> we are no longer aware of ourselves as minds somehow driving our bodies: rather, we enjoy the experience of complete embodiment. The self or subject is fully intermeshed with all the body is engaged in.
>
> In these experiences, we are our bodies as fully infused with our subjectivity and choice – rather than somehow disembodied minds precariously attached to a lumbering body.
>
> (Ess, 2017: Ruddick, 1975, pp. 88-89).

1. Ethical frameworks

***feminist ethics*/*ethics of care* –**

Carol Gilligan (1982) :

women as a group tend to emphasize the details of **relationships** and **caring**, choosing those acts that **best sustain the web of relationships constituting an ethical community**

– in contrast with **men who as a group** tend to rely more on **general principles and rules** (e.g., Kohlberg).

(**NOT** an either / or – but a both / and)

→ **"good Samaritan" ethics** that goes beyond the *minimal* requirements of prevailing law, practices (Thomson 1971);

→ relationality, ***relational self // relational autonomy***

1. Ethical frameworks

feminist ethics*/*ethics of care –

→ relationality, ***relational self // relational autonomy:***

> … a loosely related collection of views that share an emphasis on **the social embeddedness of the self** and on **the social structures and relations that make autonomy possible**. (Andrea Westlund 2009; cf. C. Mackenzie & N. Stoljar 2000; etc.)

(*contra* strongly atomistic / individual conceptions of selfhood – e.g., Augustine, Hobbes, Locke … John Wayne ...)

←→***virtue ethics*** –

1. Ethical frameworks: *Virtue Ethics*

The English word "virtue" in this context translates the Greek *arete* - better translated as "excellence." In this tradition, "…ethics was concerned with **excellences** of human character. A person possessing such qualities exhibited **the excellences of human goodness**. To have these qualities is **to function well as a human being**" (Johnson 2001, 51).

what sort of person do I want/need **to become to be content (*eudaimonia*)** – not simply in the immediate present, but across the course of my entire (I hope, long) life?

→ **what sorts of habits should I cultivate** in my behaviors that will lead to **fostering my reason/feelings/capacity for judgment** and thereby lead to **greater harmony in myself** and **with others,** including the larger natural (and, for religious folk, supernatural) orders?

Or, from **Shannon Vallor** – what practices do I need to pursue in order to acquire the virtues of **patience, perseverance, empathy, trust**, etc. as these are necessary for **deep friendships, long-term commitments to a spouse, parenting,** etc.?

1. Introduction

In sum: given

1) the difficulties evoked with new technologies – i.e., where do our ethical problems lie on a continuum between the more familiar and the more novel?
2) the range of possible ethical decision-making procedures (***utilitarianism, deontology, virtue ethics, feminist ethics***, etc.);
3) the ***multiple interpretations*** and ***applications*** of these procedures to specific cases, and
4) their refraction through ***culturally-diverse emphases*** and ***values*** across the globe

– the issues raised by Internet research are ***ethical problems*** precisely because they evoke more than one ethically defensible response to a specific dilemma or problem. *Ambiguity*, *uncertainty*, and *disagreement* are inevitable.

The best we can do: general guidelines + case histories (*casuistics*) → possible resolutions (not "solutions") of specific ethical challenges, dilemmas. (So AoIR 2002, 2012)

2. Ethics in an electrically-mediated age: changing ethical worlds – changing selves

Modern selves – modern ethics:

High modern conceptions of the self as *individual*

in *philosophical* terms:

[”atomistic” INDIVIDUAL: the self exists as the primary (perhaps only) reality (Hobbes, Descartes)]

auto-nomos (autonomy) - rational being capable of self-rule (Kant, Locke)

radically *reflexive*, disengaged rational agent → radical independence, self-responsibility – “free from established custom and locally dominant authority.” (Taylor, 1989, 167)

”We are creatures of ultimately *contingent* connections… The proper connections are determined purely instrumentally, by what will bring the best results, pleasure, or happiness.” (Taylor, 1989, 170f.)

→ *political terms*: *individual freedom and autonomy* as justifying / requiring the modern liberal-democratic state (Locke / Jefferson / Rousseau ...)

Henry Rosement, Jr. – “the peach-pit self”

still more completely: the (late) modern self: (Taylor, Giddens, Beck)

-- ***rational-individual selfhood*** - Enlightenment: ***core values* of justice, equality, including gender equality, and participation**, e.g., Rawls, Giddens' "emancipatory politics" (Giddens 1991: 211f.)

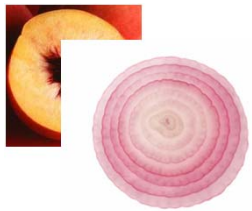
-- ***Romanticism → emotive-<u>expressive</u> selfhood*** - comes to the forefront in late modernity, Giddens' "life politics"

-- ***"theistic sources"*** -- ongoing influence, even in highly secular societies, of religious traditions, whether currently "lived" and/or apparent, e.g., in the "cultural Christianity" of Scandinavia

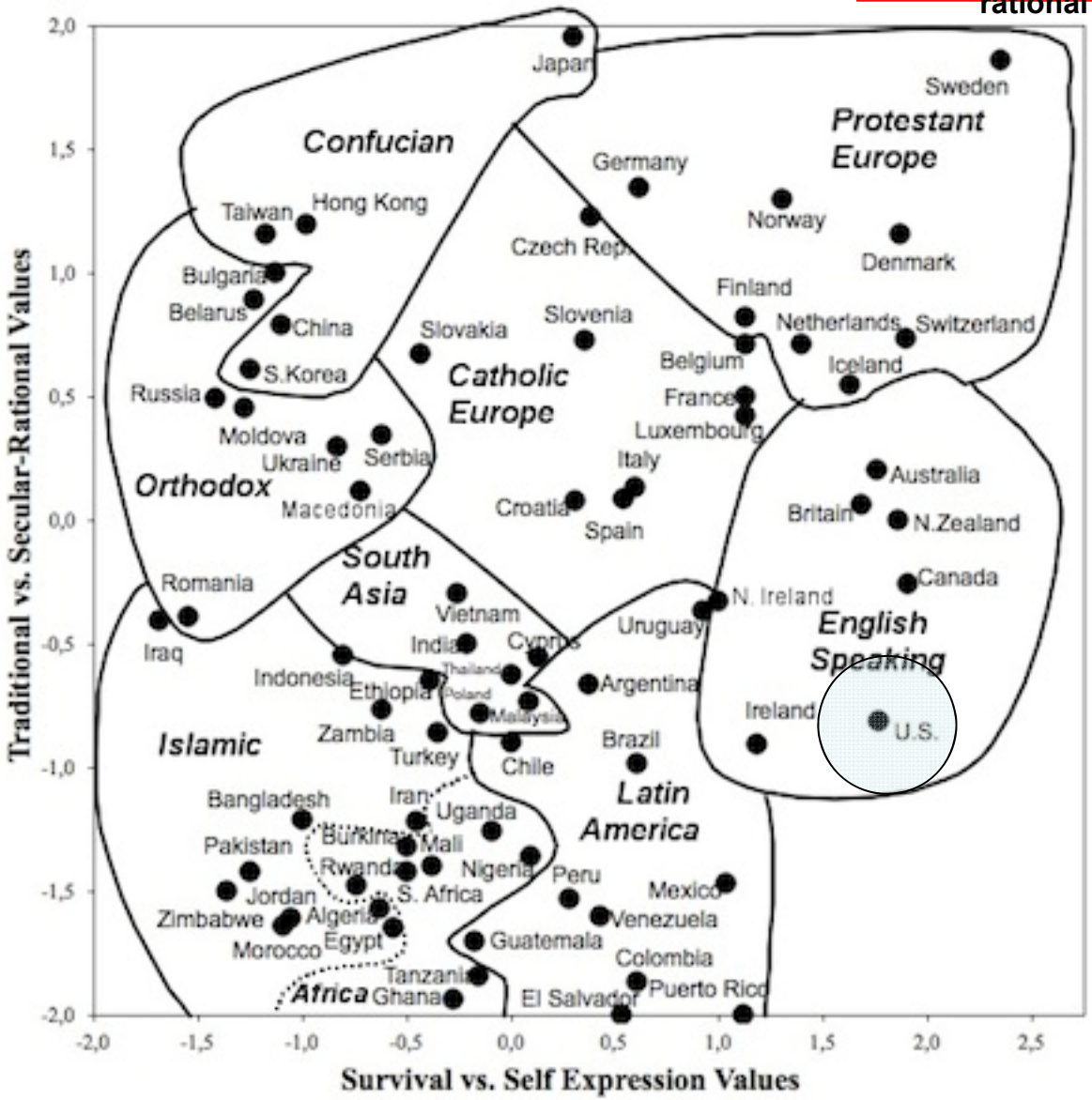
(our problem, according to Taylor, is that we struggle to live with the unresolved tensions between these diverse sources)

(high) modern (relational-) INDIVIDUAL+(emotive-) rational self

(Equality – income, gender)



Pre-modern / traditional RELATIONAL-(individual) self



3. So what's the problem?

A. (High) modern ethical frameworks as presuming the individual as an autonomous, moral agent

vis-à-vis **relational selves** and emerging notions of **"relational autonomy"** →

implications for:

responsibility* – from individual to *distributed responsibility

Reminder: Initial (high modern) ethical frameworks for decision-making:

Utilitarianism:

ethical cost-benefit analysis: will (potential) benefits of a given choice/act/rule outweigh possible harms (=costs)? "Greatest good for the greatest number"

– primary framework in U.S. – UK?

Deontology:

emphasizes **basic rights** of **autonomous individuals** (including life, liberty, pursuit of property … *privacy*, etc.) as near-absolute; to be protected (more or less) no matter what benefits might otherwise accrue.

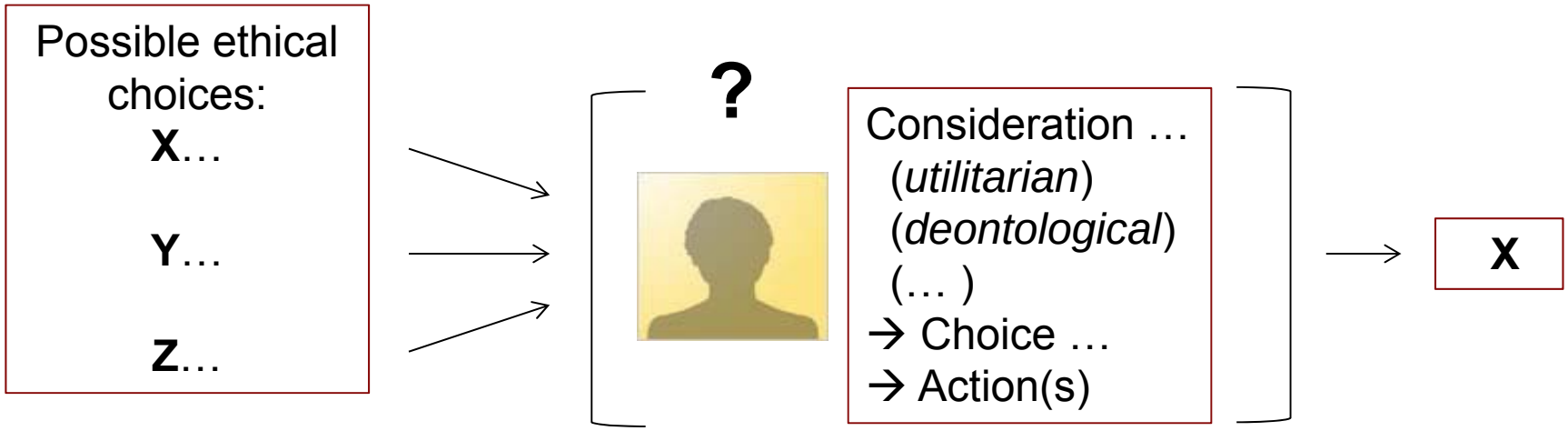
– strongly influential in Northern Europe, Scandinavia

(Cf. Stahl 2004)

→ Underlying conceptions of the **individual** ethical agent

→ (high modern) notions of *selfhood/identity*

Relatively closed ethical system:



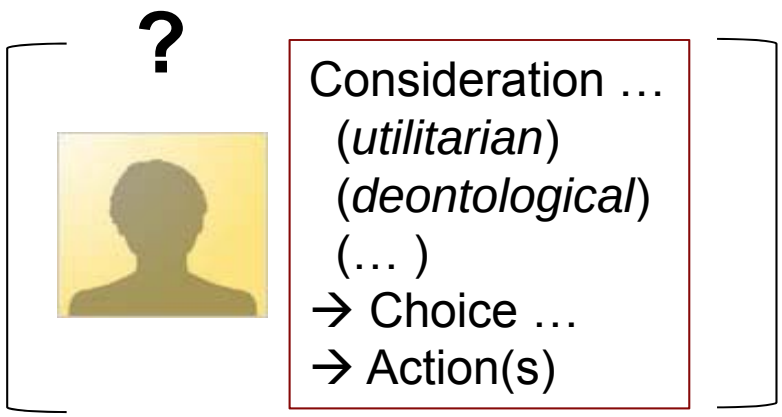
This conception of the **individual** ethical agent is affiliated with the emergence of *individual privacy* as either

valuable in its own right (**intrinsic**) *and/ or* necessary for *personal goods:*

* a sense of self and personal autonomy
* intimate relationships
* other capacities and abilities

social goods

* the grounds (personal autonomy/freedom and then the capacity for dialogue, debate, etc.) for participating in democratic society. (Johnson 2001).



→ **hence *individual privacy* emerges as a *positive good***

→ the *spaces* in which such deliberation can take place must be protected (rooted in Fourth Amendment protections against "unreasonable search and seizure" of private property, among others (Debatin 2011: 49).)

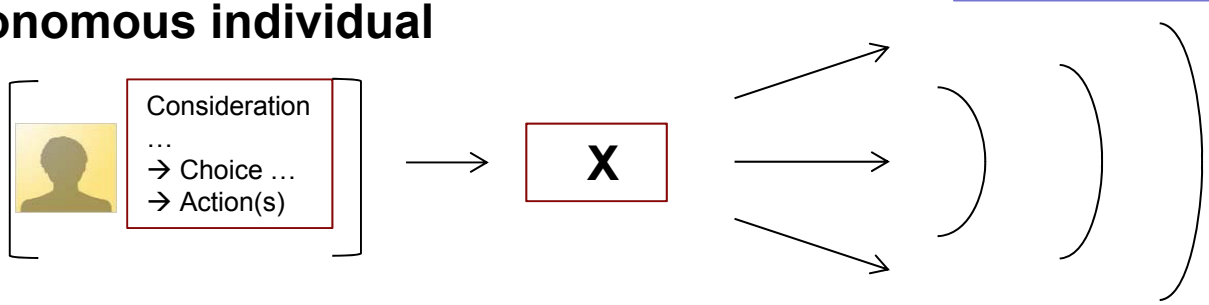
Example:

(Internet) research ethics as the specific project to protect the *research subject* as an *autonomous* individual with a right to *privacy* (and so confidentiality, anonymity, etc.),

BUT from the perspective of either ….

(Further consequences)

autonomous individual



Deontology
e.g. Kant:
capacity to give oneself one' own rule (*auto-nomos*)
→ respect for Others "always as ends, never as means only"

Utilitarianism
focus on *consequences* of acts
→ "risk / benefit" analysis
→ "balance" of risk to subject(s)
vs.
(potential) benefits to society


3.A

changing notions of selfhood ←→ changing ethical frameworks

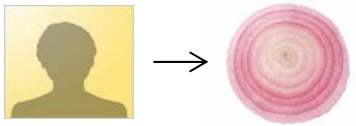
(ecological ethics)

(**phenomenology**: "We are. Therefore I am" (Natanson 1970, 47)

communicative rationality: **the self** is "…from the start interwoven with relations of mutual recognition." This interdependence, "...brings with it a reciprocal vulnerability that calls for guarantees of mutual consideration to preserve both **the integrity of individual persons** and **the web of interpersonal relations** in which their identities are formed and maintained" (McCarthy 1978,13)

feminist ethics: empathic decision-making within "the web of relationships" (Gilligan 1982)

virtue ethics: the practices and habits of excellence ("virtues") required for ***relational selves*** to foster **contentment (*eudaimonia*)** and community harmony (e.g., Hursthouse 1999)



3. A

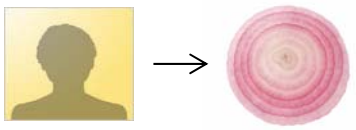
changing notions of selfhood ←→ changing ethical frameworks

cf. rise of relational conceptions of selfhood in social sciences, most especially those models prevailing in contemporary studies of "Web 2.0" venues such as Social Networking Sites (SNSs), e.g.,

Irving Goffman, *The presentation of self in everyday life* (1959): advances a *relational,* "very rationalist-strategic conception of the self" - but also "more symbolic-pragmatic," as "all about trying to (re)-**establish social order through intersubjective alignment in interaction**" – inclusive of the emotive? (Stine Lomborg)

Likewise, **G. Simmel** (1910), "the sociable self"

(Cf. K. Gergen 2009, etc.)



// emerging notions of ***relational autonomy*** in

contemporary (feminist) philosophy:

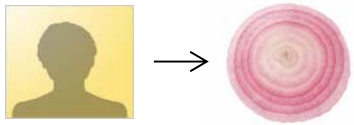
… a loosely related collection of views that share an emphasis on ***the social embeddedness of the self and on the social structures and relations that make autonomy possible***. (Andrea Westlund 2009; cf. C. Mackenzie & N. Stoljar 2000; etc.)

contemporary information and computing ethics (ICE):

Luciano Floridi: interconnection and the rise of ***distributed responsibility*** **and** ***distributed morality*** (2012) (e.g., "the shopping Samaritan," peer-to-peer lending)

Judith Simon: "distributed epistemic responsibility" (using, e.g., Karen Borad's "intra-actions" as correlative of "entanglement", QM understandings of intersubjectivity; Lucy Suchman in HCI, etc. – 2013, 2015)

See "Onlife Project," <https://ec.europa.eu/digital-agenda/en/onlife-initiative>



Complication for IRE: shifting emphasis from individual to relational self//identity

(larger communities / networks)

(close ties / *intimsfære*)

(weak ties)

Virtue Ethics
practices, habits
e.g., *patience, perseverance, empathy*
that establish, foster
relationships, e.g., **friendship**
(Vallor 2009, 2011, 2012)
+
Care Ethics

relational self: relational autonomy / webs of relationships …

autonomous individual

Consideration
…
→ Choice …
→ Action(s)

X

(Further consequences)

Deontology | **Utilitarianism**

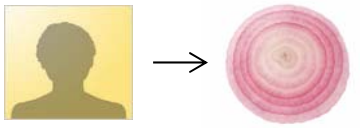
The shift towards relational privacies and research ethics guidelines: *privatlivet*, the *intimsfære*, and the NESH (2006) guidelines

5. The obligation to respect human dignity

Researchers shall work on the basis of basic respect for human dignity.

While research can help promote the value of human life, it can also threaten it. Researchers must show respect for human dignity in their choice of topic, in relation to their research subjects, and in reporting research results. This implies that research processes must be held to certain standards:

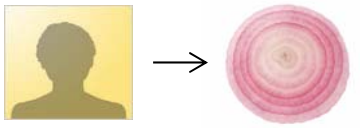
- ensure freedom and self-determination (Sections 6, 8, 9, 12, 13, 14, 15 and 19);
- safeguard against harm and unreasonable suffering (Sections 7, 9, 11, 12, 13, 17 and 18);
- protect privacy and close relationships (Sections 14, 15 and 16).



→ Distributed responsibility in *praxis* (i): **Bendert Zevenbergen** et al (2016).

networked selves ←→ relational selves → virtue ethics

Open Observatory of Network Interference (OONI): a global observation network that aims to measure network interference – such as censorship, surveillance, or data discrimination – in countries around the world (Filasto and Appelbaum, 2012). The project uses a software probe installed locally to infer network interference in a given region, for example by making HTTP17, HTTPS18 and DNS19 requests. The project relies heavily on voluntary participation in regions around the world as their only method of deployment… (p. 20)



Distributed responsibility in *praxis* (i): Bendert Zevenbergen et al (2016).

recognition of *relational self* // turn to virtue ethics …

> it is **not just about the individual participant** who have given informed consent, because **if they are arrested by the authorities there may also be repercussions for their direct social circle** (who did not give consent). (p. 24)

especially because of the relationship between *power* and *ethics*:

> greater duty to protect the *more vulnerable* ←→

those with more power have **greater obligations to exercise power with care and responsibility:**

> … virtue ethics should be applied to Internet research and engineering – where **the technical persons must fulfil the character traits of the 'virtuous agent'** …

mHealth for Maternal Mental Health: Everyday Wisdom in Ethical Design

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ABSTRACT

Health and wellbeing applications increasingly raise ethical issues for design. User-centred and participatory design approaches, while grounded in everyday wisdom, cannot be expected to address ethical reflection consistently, as multiple value systems come into play. We explore the potential of *phronesis*, a concept from Aristotelian virtue ethics, for mHealth design. Phronesis describes wisdom and judgment garnered from practical experience of specific situations in context. Applied *phronesis* contributes everyday wisdom to challenging issues for vulnerable target users. Drawing on research into mHealth technologies for psychological wellbeing, we explore how *phronesis* can inform ethical design. Using a case study on an app for self-reporting symptoms of depression during pregnancy, we present a framework for incorporating a phronetic approach into design, involving: (a) a wide feedback net to capture phronetic input early in design; (b) observing the order of feedback, which directly affects value priorities in design; (c) ethical pluralism recognising different coexisting value systems; (d) acknowledging subjectivity in the disclosure and recognition of individual researcher and participant values. We offer insights into how a phronetic approach can contribute everyday wisdom to designing mHealth technologies to help designers foster the values that promote human flourishing.

Author Keywords

Ethical design; mHealth; maternal mental health; phronesis; psychological wellbeing; virtue ethics; human flourishing;

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g. HCI): Miscellaneous.

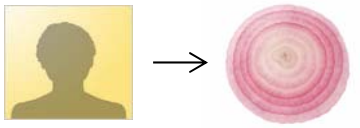
INTRODUCTION

Mental health is a primary determinant of wellbeing and a major concern for society [83]. HCI research has recently started to focus on how technology can support psychological wellbeing [e.g. 1, 21, 78]. The growth in use and sophistication of mobile health (mHealth) apps for mental health presents particular opportunities and challenges for design [22, 83]. Applications for mHealth for psychological wellbeing have complex design requirements, involving sensitive information and client/therapy conditions [22] and there are practical difficulties in understanding users' experience of such technologies early in the design process [ibid]. Indeed we still know relatively little about how such mHealth technologies are actually experienced and engaged with by clients outside the clinical context [81].

Meanwhile, applications and systems that support wellbeing are central to the turn to 'positive computing' in HCI [15]. Researchers are paying greater attention to the human and societal impact of technological design [e.g. 34, 67, 86] while encouraging a more holistic view of user experience that looks beyond the purposefulness of technologies towards how they might also promote wellbeing [e.g. 45, 75]. Humanistic approaches can contribute insights into how HCI can foster 'the good life' [4], a primary concern of Aristotelian virtue ethics (VE), which promotes the values that achieve human flourishing [25]. VE is drawing increasing interest from researchers in philosophy of technology and ethical computing [25, 73, 76, 77] and offers particular insights for HCI design [27].

Design is not value neutral and requires certain questions to be addressed early on to ensure a value-sensitive process [34]. However, an ethical design process needs to be not just value-sensitive but sensitive to *whose* values are in play [47, 73], an issue of particular relevance in relation to psychological wellbeing.

Being 'user-centric' is a core tenet of HCI [65] and a well-informed design process uses various methodologies to produce knowledge about the needs of those for whom it is designed [56]. We generate user knowledge from standards and principles of interaction and through cognitive and behavioural concepts [41], as well as in specifying project requirements and conducting user experience (UX) research



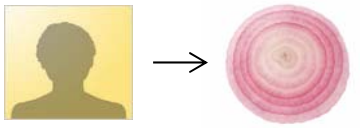
Distributed responsibility in *praxis* (ii): Slándáil (EU FP7 Security sponsored project #6076921)

The platform will **harvest social media data**,

including **textual, image and video data**, during a natural disaster (**data which will include sensitive data such as individuals' names**) and will **aggregate this data** and **provide outputs** to emergency managers that identify vulnerable areas.

outputs will be in the form of actionable information that has been derived from aggregated social media data and **identifies key places to target** that are **under particular threat of damage or loss of life from a natural disaster**.

The system is designed to **increase efficiency** in emergency response, but it cannot be understated that **the level of data collection may be intrusive or may cause some level of distress to the general public.** (Jackson et al 2015, 168)



Distributed responsibility in *praxis* (ii): Slándáil (EU FP7 Security sponsored project #6076921)

a collaboration between

9 beneficiaries in

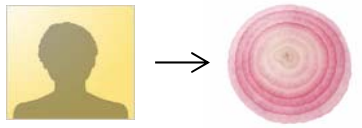
Italy, Ireland, Germany and the UK, including academics (e.g., computer scientists, lawyers, anthropologists …);

emergency operatives – e.g. the Irish Police / *Guarda;*

Civil protection organisations, and

four Small to Medium Enterprises with expertise in software and communications.

→ a (potentially commercial) system



Distributed responsibility in *praxis* (ii): Slándáil (EU FP7 Security sponsored project #6076921)

→ ***legal* issues: collection of personal information / personally identifiable information (PII) directly violates national and EU data privacy protection laws**

a model for primary issues and standard resolutions for big data projects: e.g. required provisions for

Security of the Data.

Data Accuracy.

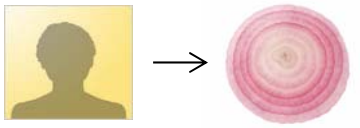
Anonymisation.

Data Expiry … (Jackson et al 2015)

Frameworks:

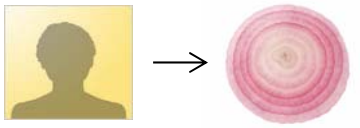
Value pluralism, State of Exception Theory …

→ "From consent to **an ethics of care**" – Jackson (under review)



Distributed responsibility in *praxis* (ii): Slándáil → Care ethics (from Damian Jackson, in review)

1) **grounded in an ontology of the self as relational**, understanding that identities are mutually constituted
2) morality exists not in rules or guidelines but **in practices of care through which we discharge the responsibilities inherent in our relationships with particular others**.
3) **care ethics** is not "prescriptive," but rather "**understands relationships ethically as practices of responsibility and recognition**".
4) **a more critical conception of care itself**, as ambivalent rather than normatively good, recognising that narratives of care can be **paternalistic** (Robinson, 2011, ch. 5), or even reify or justify relations of **domination and subordination** (Narayan, 1995).



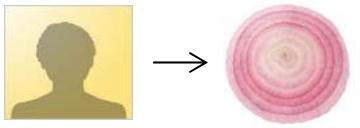
Distributed responsibility in *praxis* (ii): Slándáil → Care ethics (from Damian Jackson, in review)

e.g.,

care ethics would begin with an analysis of **current interactions** and **patterns of relating** between the **various stakeholders in the disaster response situation.**

If we focus on the **relationship** between **emergency managers** and **members of the public** who post data on social media we can ask questions about **each party's perspective on the relationship**. Is it regarded as a relationship at all, or do the emergency managers simply regard the social media data as an additional disembodied information source to be mined for potentially useful information?

Similarly, **what is the understanding of the data providers** in terms of **relations with other potential users of the data** and **how would they feel** about **alternative unexpected uses such as by disaster response organisations**?



Distributed responsibility in *praxis* → AoIR IRE 3.0

Jonathon Hutchinson, Fiona Martin, and Aim Sinpeng, "Chasing ISIS: Network Power, Distributed Ethics and Responsible Social Media Research":

new professional standards, such as the AoIR guidelines, and to advocate for **social media research in context** – based on **an understanding of the limits of distributed responsibility** and **the different meanings of social visibility for diverse social media agents, human and non-human.**

David Moats and Jess Perriam, "How Does it Feel to be Visualized?: Redistributing Ethics":

a *distributed ethics* as a way of resolving the challenges evoked by **the technologies of networked interconnection, including algorithms, APIs, and related research tools**.

-- in: Zimmer, M. and Kinder-Kurlanda, Katharina (eds.), *Internet Research Ethics for the Social Age: New Challenges, Cases, and Contexts*. Peter Lang

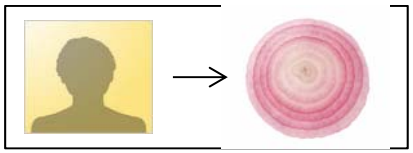
3. So what's the problem?

B. (High) modern conceptions of individual privacy as positive good

vis-à-vis

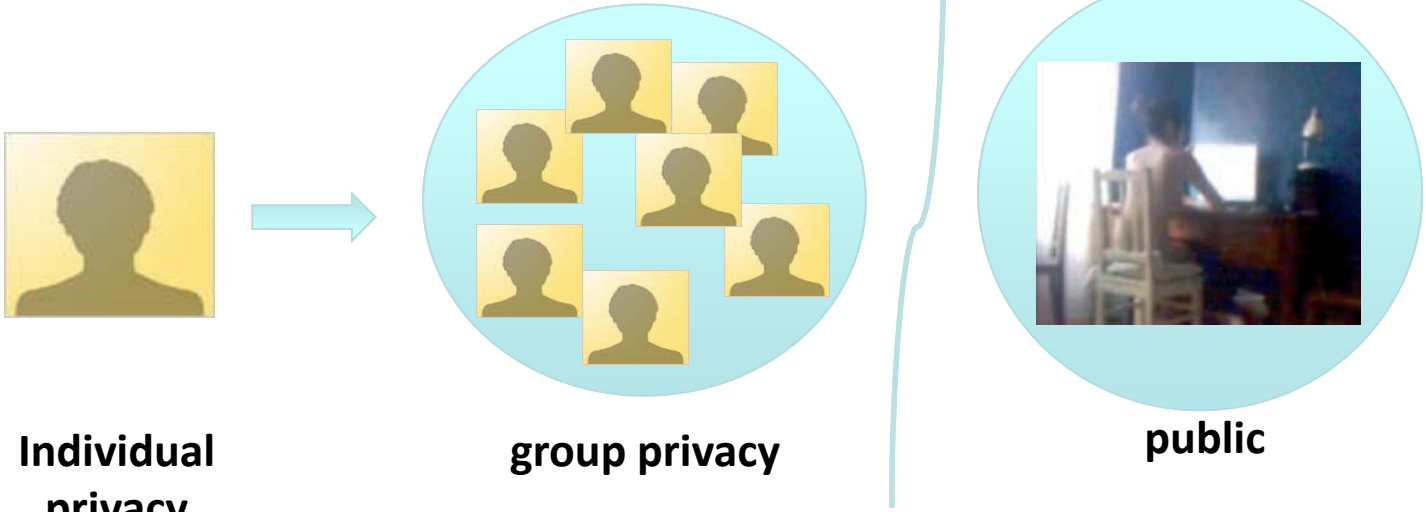
(late modern) shifts toward "publicy,"
***shared* "personal space"**

→ group privacy / group informed consent?



// changing conceptions of privacy:

Gal … Nissenbaum



"publicly private" ←→ "privately public"

close friends, relatives - videos on YouTube "hidden" by tagging them so that only friends and relatives would know how to find them

relatively unknown "friends" - but still highly private / personal information re. identities, sexual orientation, but not, e.g., home address

(Patricia Lange (2007) in McKee & Porter 2009, 78)

changing conceptions of privacy / privatlivet
→ What *kind(s) of "privacy" / privatlivet?*
Nissenbaum: privacy as contextual integrity

Nissenbaum builds her account on **James Rachel's theory of privacy** – a *relational* (or, alternatively, *social*) understanding of selfhood.

Rachels demarcates a defining connection between **privacy expectations**, on the one hand, and **specific social roles**, on the other, such as "businessman to employee, minister to congregant, doctor to patient, husband to wife, parent to child, and so on" (Rachels 1975: 328, cited in Nissenbaum 2010: 65, 123).

Nissenbaum builds on Rachels' account:

> **privacy rights** defined in terms of **flows of information** as "appropriate" to a given **context**:

a **context**, in turn, is defined by three parameters – **beginning precisely with the *actors* and thereby, at least implicitly, the *relationships* between actors. Example: medical information shared between doctor / patient**

(remaining parameters are the attributes (types of information) and "transmission principles" of a given context (Nissenbaum 2011: 33).

→ **information** is not either public or private. It is not either secret or overt. There are, instead, many nuances of secrecy and disclosure.

-- Fornaciari, 2012; Niamh Ní Bhroin

The shift towards relational privacies and research ethics guidelines: *privatlivet*, the *intimsfære*, and the NESH (2006) guidelines

// notions of ”the mature human being” in Article 100 of the Norwegian Constitution:

This is **neither the collectivist concept** of the individual, which states that the individual is subordinate to the community, **nor the individualistic view**, which states that regard for the individual takes precedence over regard for the community. The conception of ”the mature human being” can be said to embody **a third standpoint that transcends the other two and assumes that a certain competence (socialization or education) is required in order to function as an autonomous individual in the open society**. (*There Shall Be Freedom of Expression* 2005, 18).

cf. “The Onlife Manifesto”: the self as an inherently **relational** [and] **free [individual]** self. (2013, 7)

4. Concluding remarks: ethics in the (analogue) digital age?

A. // copyright and other (high modern) notions of property

US/Europe | FLOSS /copyleft | Confucian

creative commons
http://www.creativecommons.org

Ubuntu

Greater stress on *individual exclusive property rights*

Greater stress on *community inclusive property rights*

B. The shift towards relational privacies and research ethics guidelines: *privatlivet*, the *intimsfære*, and the NESH (2006) guidelines

Contra prevailing research ethics codes – especially U.S. – that build on ***individual*** conceptions of privacy rights and expectations –

NESH guidelines include attention to *relational* conceptions of privacy (as underlain by relational notions of *privatlivet*, the *intimsfære*?):

13. The obligation to respect individuals' privacy **[privatlivet] and *close relationships***

13. The obligation to respect individuals' privacy [privatlivet] and *close relationships*

Researchers shall show due respect for **an individual's privacy**. Informants are entitled to be able to check whether confidential information about them is accessible to others.

13. Krav om respekt for individers privatliv og nære relasjoner

Forskeren skal vise tilbørlig respekt for individets privatliv. Informanter har krav på å kunne kontrollere hvorvidt sensitiv informasjon om dem selv skal gjøres tilgjengelig for andre.

Respekten for privatlivets fred tar sikte på å beskytte personer mot uønskede inngrep og mot uønsket innsyn. Dette gjelder ikke bare følelsesmessige forhold, men også spørsmål som angår sykdom og helse, politiske og religiøse anskuelser og seksuelle legning.

Forskere bør være spesielt lydhøre når de stiller spørsmål som angår intime forhold og unngå å sette informanter under press. Hva som oppfattes som følsomme opplysninger, kan variere mellom personer og grupper.

Skillet mellom privat og offentlig sfære kan noen ganger være vanskelig å trekke, som når det gjelder informasjon om atferd som formidles og lagres på internett.[11] Ved bruk av materiale fra slik interaksjon må forskeren ta tilbørlig hensyn til at folks forståelse av

13. The obligation to respect individuals' privacy [privatlivet] and *close relationships*

Researchers shall show due respect for **an individual's privacy**. Informants are entitled to be able to check whether confidential information about them is accessible to others.

Respect for privacy aims at protecting individuals against unwanted interference and exposure. This applies not only to emotional issues, but also to questions that involve sickness and health, political and religious opinions, and sexual orientation.

Researchers should be especially compassionate when they ask questions that involve intimate issues and they should avoid placing informants under pressure. **What is perceived as sensitive information can vary from one individual or group to the next.**

Distinguishing between the private and public spheres can sometimes be difficult when it comes to information about behaviour that is communicated and stored on the Internet. When using material from such interactions, researchers must pay sufficient attention to the fact that **people's understanding of what is private and what is public in such media can vary**. (NESH 2006 B.13, p. 17)

C. Not (necessarily?) the end of individual privacy

→ more complex: **both** continuing *individual* privacy expectations **and** growing, relationally-oriented ”contextual integrity”

D. Future developments?

From ”publicly private” / ”privately public”: ”personal space”

→ shift from *individual* to *relational* selfhood + Nissenbaum: privacy as ”contextual Integrity” + NESH guidelines as first example

→ new research ethics / codes – AoIR IRE 3.0 (2016-2019)

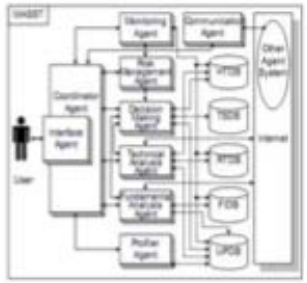
E. Relational selfhood, distributed morality, and new forms of mediated **intersubjectivity**

(close ties / *intimsfære*)

(weak ties)

(larger communities / networks)

(AAs / Multi-Agent Systems)



designers

companies

states …

relational self: relational autonomy / webs of relationships …

autonomous individual

Consideration
…
→ Choice …
→ Action(s)

(resulting ethical choice)

(Further consequences)

Virtue Ethics
practices, habits
e.g., *patience, perseverance, empathy*
that establish, foster *relationships,*
e.g., **friendship**
(Vallor 2009, 2011, 2012)

Deontology
e.g. Kant:
capacity to give oneself one' own rule (*auto-nomos*)
→ respect for Others "always as ends, never as means only"

Utilitarianism
focus on *consequences* of acts
→ "risk / benefit" analysis
→ "balance" of risk to subject(s) vs. (potential) benefits to society

F. Current and future challenges in research ethics – e.g., the relational-distributed focus

→ foregrounds the increasingly central issue of the need to **protect *researchers*** as much as (if not more than) our informants, as **their research risks exposing them to the full array of hate speech, threats, and acts that are now routinely directed at them**

– especially if they are women researching predominantly male hate behaviors

(e.g., Massanari, A. 2017. # Gamergate and The Fappening: How Reddit's algorithm, governance, and culture support toxic technocultures. New Media & Society 19 (3), 329-346);

Lindsay Blackwell, Katherine Lo and Alice Marwick: a guide for researchers who wish to investigate topics that may leave them open to online harassment or other networked forms of abuse. http://datasociety.net/output/best-practices-for-conducting-risky-research/

F. Current and future challenges in research ethics –

the relational-distributed focus →

Another increasingly central issue, concerns the multiple ethical issues confronting **researchers who increasingly depend on commercial sources for "big data"**

(Katrin Weller and Katharina E. Kinder-Kurlanda, "To Share or Not to Share? Ethical Challenges in Sharing Social Media-Based Research Data")

– and/or **"grey data," i.e., data that has been leaked and made public by hackers**:

(Nathaniel Poor, "The Ethics of Using Hacked Data: Patreon's Data Hack and Academic Data Standards.")

For relational selves, "sharing is caring" – but such sharing is often ethically fraught in ways that remain to be fully explored and at least partially resolved.

Dette er Smart City

Smart City, eller smarte byer, er et begrep som brukes over hele verden og som forklarer hvordan byer og bygder skal utvikles til å bi bærekraftige og moderne samfunn der både økonomisk, sosiale og miljømessige verdier gjennomsyrer alt vi gjør og skaper.

Det betyr at vi bygger samfunn ved å bruke bærekraftige ressurser effektivt, at vi tilfredsstiller behovene til innbyggerne og at vi har en god økonomisk vekst. I takt med urbanisering og en stadig økende befolkning, går den teknologiske utviklingen i rasende fart. Noen av de store trendene er Big Data, Internet of Things, IKT og digitalisering, som vi nå bygger våre fremtide byer på.

Smart teknologi skaper nye muligheter for å få bedre tjenester for innbyggere, mer effektive og smartere drift av offentlig og privat sektor, og utgjør et enormt marked for næringsutvikling. Byer produserer store mengder data som gir informasjon og innehar mønstre som vi tidligere ikke har kunnet se. Førerløse elektriske busser og lokale energimarkeder hinter om hvilken vei samfunnet utvikles. Vi jobber med infrastrukturer som Smarte Bygg, Smart Vann, Smart Energi, Smart Helse, Smart Governance og Smart Mobilitet der teknologiske løsninger skaper nye muligheter gjennom integrasjon, grenseoverskridende samarbeid og innovasjon.

Vi skal sammen jobbe med Smart City for å nå EUs klimamål, for å skape økonomisk vekst og for å øke velferden hos innbyggerne. Det kreves et quadruple helix tankesett, som vil si tett samarbeid mellom akademia, offentlig sektor, næringsliv og innbyggere for å nå dit.

> *Det er på tide å hoppe på toget, for det har allerede begynt å rulle!*
> *Ulrika Holmgren, seniorrådgiver hos Smart Innovation Norway*

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Smart mobilitet

Handler om å transportere mennesker og gods fra en punkt til en annen på nye, innovative og bærekraftige måter. Må man eie en egen bil, kan naboen levere din matkasse, og hva kan vi egentlig bruke all

Publisert : 1. mai 2016

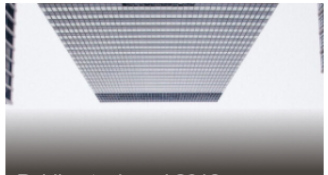
Smart vann

Smarte målere for vann gir privatpersoner og kommuner oversikt og kontroll over vann infrastruktur. Automatisk måling og avregning er bare første trinnet. Lekkasje i kommunale nett kan oppdagas raskt og

Publisert : 1. mai 2016

Smart Energi

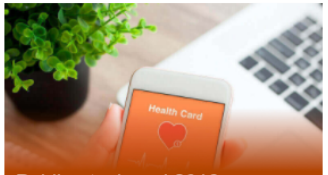
Energimarkedet står overfor en tid med store omveltninger: Gamle, statiske energisystemer



Publisert : 1. mai 2016

Smarte bygg

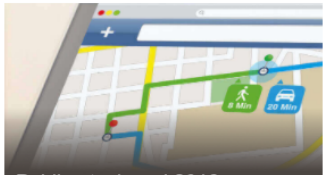
I byggsektoren finnes store vinster å hente både ur ett energiperspektiv men også ur



Publisert : 1. mai 2016

Smart helse

En stadig økende og aldrende befolkning driver utviklingen på smart helse fremover i et høyt



Publisert : 1. mai 2016

Smart governance

Digitalisering av offentlig sektor og informasjonsplattformer effektiviserer kommunikasjonen

LIGHTING
7 LED lights are weather adaptive and communicatio are automatically sent to th Department of Public Work when the bulbs need to be changed.

FIRE DETECTION
8 Sensors monitor conditions wooded areas that might be can also detect fires in buildi the fire department in an em

ENERGY MONITORING
9 Power plants can be monito be informed of any influx in

SOLAR PANELS
10 Solar panels can be monitor are providing and whether t

TRANSPORTATION CONGE
1 Smart transportation systen in traffic patterns. They also infractions. In doing so, the by city DOTs to make mobil

WATER AND WASTEWATE
2 Monitoring devices can dete determine whether water in

PARKING APPS AND KIOSI
3 Apps coordinate with smart is parking availability.

BRIDGE INSPECTION SYST
4 Sensors monitor the structu city engineers of any issues. reach areas.

SELF-DRIVING CARS
5 Self-driving cars shuttle pec providing rides for others ar owners are occupied with w

WASTE MANAGEMENT SEI
6 Sensors detect the amount in recepticals around the cit sanitation workers can maxi efficiency in their routes.

CITIES

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NATIONAL LEAGUE OF CITIES

One last example: *dissemination ethics* (Markham & Buchanan 2012)

Especially in Scandinavia, Europe, and the U.S. – researchers are (increasingly) good at anticipating and responding to ethical issues evoked by initial research methodologies and designs,
i.e., the standard issues of Human Subjects protections – anonymity, confidentiality, informed consent ....

BUT: what is increasingly problematic in many projects are the **Dissemination Ethics**: what happens with your data and findings – including, e.g., direct quotes from interviewees – as these

(a) *may* be used in subsequent publication, and/or

(b) (all but) *must* be used under (increasing pressures towards / requirements for) **Open Research Data?**

But back to you … Fairphone example revisited

Do you have an ethical *obligation* to buy a Fairphone?

Yes? No? Maybe?

***WHY?* – i.e., what *reasons, arguments, evidence* can you offer to support your *judgment / decision*?**

→ ***Underlying assumptions?***

Individual selfhood + responsibility

←→

relational selfhood + distributed responsibility?

→ ***Ethical framework(s)?***

Utilitarian? Deontological? Virtue Ethics? Care Ethics? …