

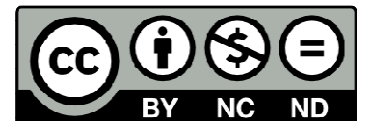
The Black, the White and the Gray Areas

Towards an International
and Interdisciplinary Definition of
Scientific Misconduct

Daniele Fanelli



innogen



Why Unify?

- Research is increasingly international and interdisciplinary
- Countries/disciplines might have diverging standards of conduct, RCR programs, and procedures against misconduct
- Not all countries/fields have defined standards
 - They could refer to international ones
 - They could create their own inspired by these
- In this presentation:
 - Focusing on the definition of research misconduct
 - Schematic overview of how national definitions evolved and differ
 - Outline why
 - Possible solutions and remaining problems

The Sample

16 countries with one or more official definitions of misconduct

	1981			1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
US	x			PHS	NSF	PHS	NSF		x	NAS			x					OSTP		NSF			PHS					
AU								NHMRC							NHMRC							x		x	NHMRC			
DK										DCSD						DCSD					x		DCSD			DCSD		
NO												NCISM						x							NCISM			
DE															MP					DFG								
SW																SRC	x					SMR	SRC					
FI																NREC					TENK							
FR																	INSERM											
NL																			KNAW									
CN																								MOT	CAS			
JP																					x	RIKEN		MEXT				
CH																						SAAS						
IN																								ICMR				
CR																									CESHE			
INT																									x		OECD	
UK																											UKRIO	

RED=Research Institution's Definition; X=unofficial definition

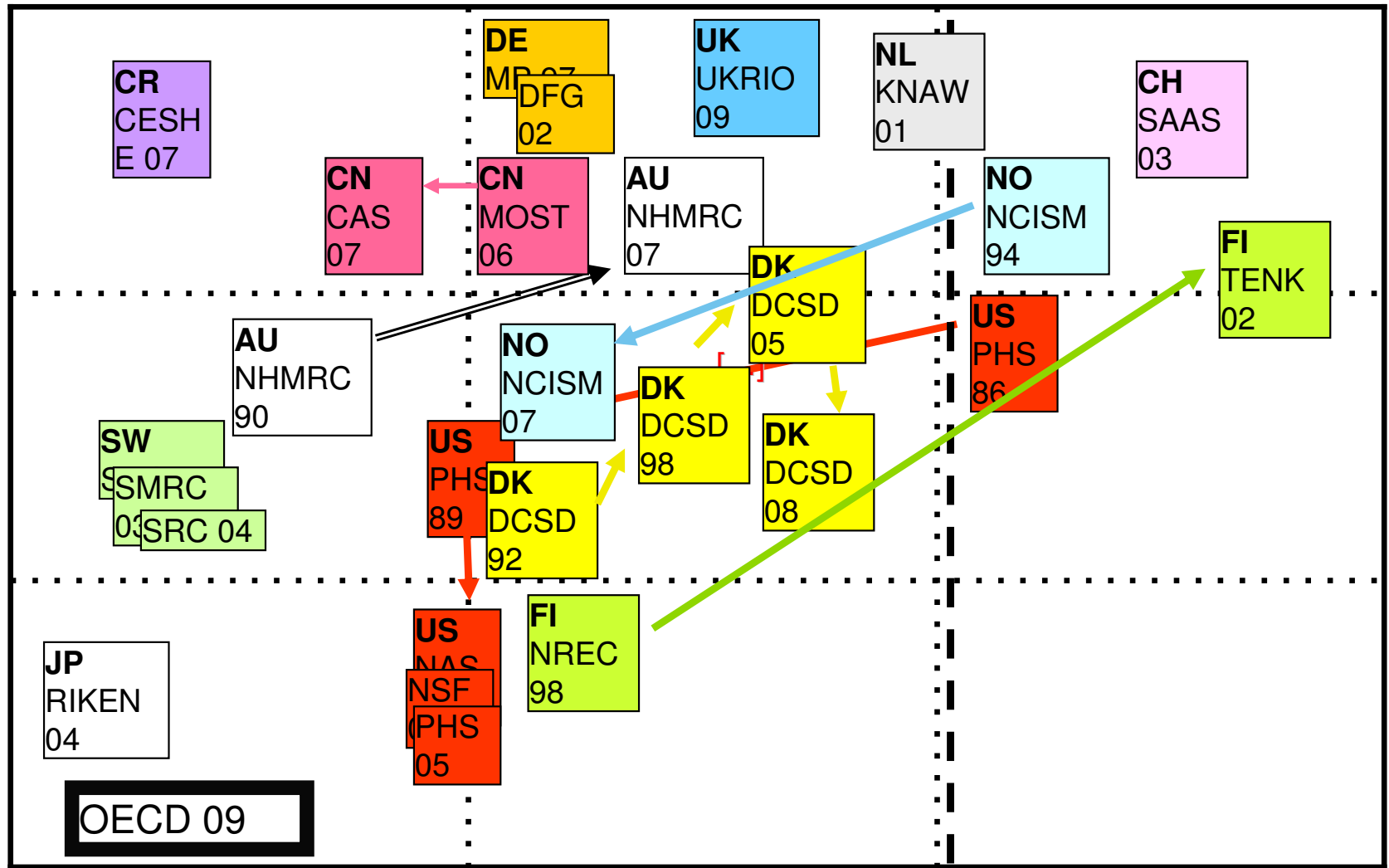
- Not a systematic search, and surely not complete
- Please send me yours! dfanelli@staffmail.ed.ac.uk

Two main areas of disagreement

Other
Unethical
Behaviours

Serious
Deviations
from Stand.
Practices

Fabrication
Falsification
Plagiarism



Intentional act

Gross negligence
(reckless act)

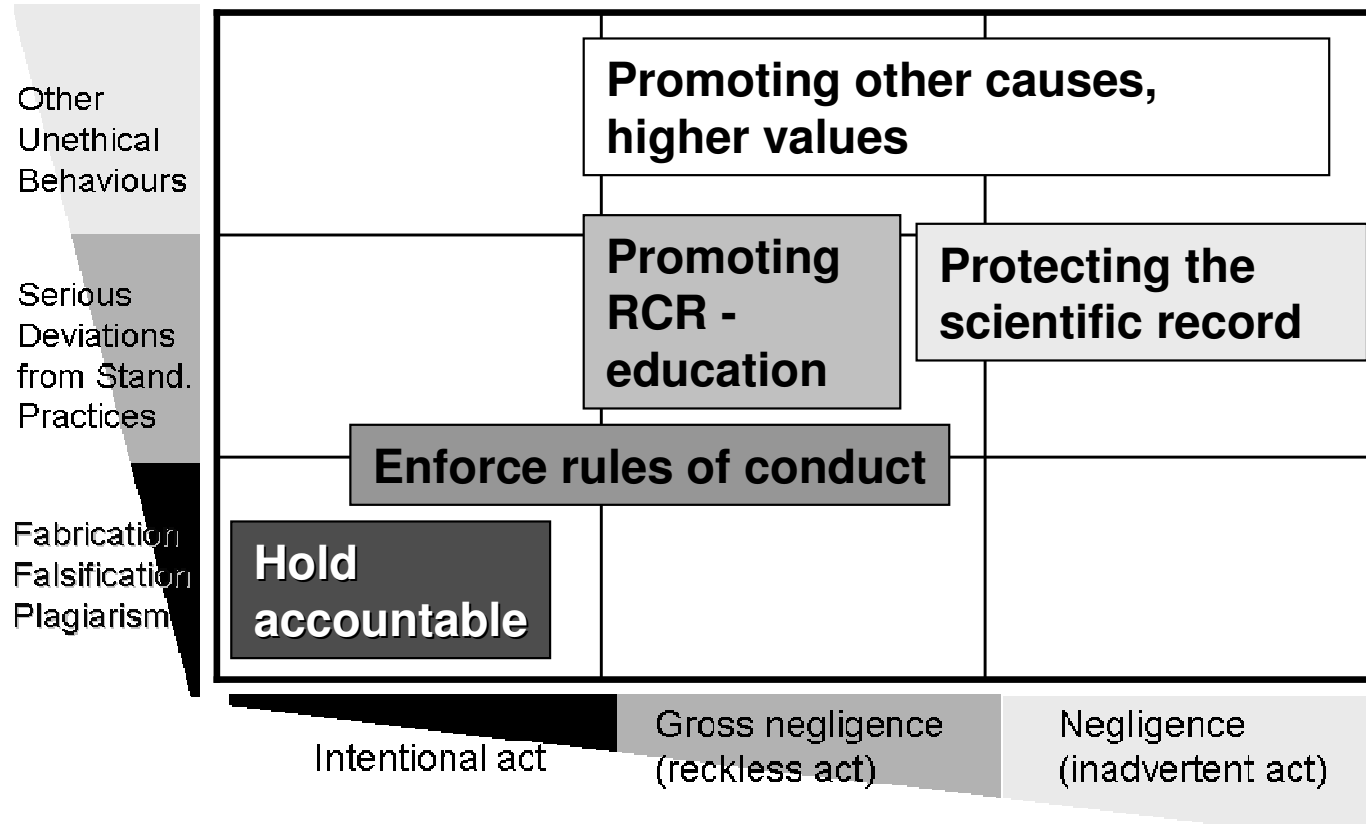
Negligence
(inadvertent act)



Note: This classification is for schematic illustrative purposes only, based on the words used in each definition, and should not be taken literally. A much more accurate analysis is presented in the proceedings to this conference.

WHY THIS DIVERSITY?

- Different science-society philosophies, different objectives (Nylenna and Simonsen, 2006, Resnik 2003)



- To achieve a common definition, solutions include:
 - Clarify, unify terminology/concepts (e.g. “reckless”, QRP)
 - Agree on a minimum common denominator of goals and definitions
 - Broad def. with distinctions within (e.g. FFP “punishable” (Resnik 2003), and OECD?)

Unsolved problems, with either kind of definition

- “FFP + intention” definitions are key, but:
 - Intentionality is very hard to prove, either way
 - In reality, still lack clear delimitations
 - Fabrication ok, but falsification & plagiarism are threshold-based
 - The “serious deviations” concept never left: In the US, “A finding of research misconduct requires that there be a significant departure from accepted practices of the relevant research community” (Federal Register dated May 17, 2005; 42 CFR Parts 50 and 93)
 - Judgements vary by community/paradigm (e.g. discipline)
- Inefficient deterrent, does not protect science from misconduct and the literature from biased findings
- Other solutions?
 - I have a proposal, please read my poster!
- Please send me definitions and comments: dfanelli@staffmail.ed.ac.uk



Thank you!

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