Sorting Things Out: Classification and Its Consequences

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General Questions

What is a classification?

How and in what terms should a classification be defined and described?

What is its social or cultural significance and power?

- The authors approach these questions in two ways:
 - by examining classification as a general category and considering the methodological and theoretical issues of classification
 - links these questions to specific cases such as tuberculosis among patients and physicians

Silent Sister

• This silent sister became "a telling indicator of the entangled infrastructure, medical politics, and the use of metrics in classifying tubercular patients."

• "What other silent sisters will we encounter in our infrastructural inversion—what surveillance, deception, caring, struggling, or negotiating?"

- Four themes, methodological points of departure
 - Ubiquity
 - Materiality and Texture
 - The Indeterminacy of the Past: Multiple Times,
 Multiple Voices
 - Practical Politics

Ubiquity

- Classification schemes and standards saturate our environment
- Airline phone call, sending a letter, etc...
- Complex webs: you can identify a single classification scheme and theoretically pull it out of the web, but in reality it cannot stand alone
- The "beauty" is that they are difficult to see; they are engrained into our society that we expect them to be there or we learn to ignore them

Materiality and Texture

- "Classifications and standards are *material*, as well as symbolic."
- All classifications schemes are mixtures of physical entities and conventional arrangements, and then how those specifications are implemented.

The Indeterminacy of the Past: Multiple Times, Multiple Voices

- "We are constantly revising our knowledge of the past in light of new developments in the present."
- We access the past through these classification systems—formal or informal, hierarchical or not: religious conversations, coming out as gay, for example

"In 1640, the English revolution occurred; this led to a twenty-year period in which the English had no monarchy," (p.41).

- Translation problems with the Gregorian calendar, which was adopted some 100 years later
- Classification of peoples into English, Irish, Scots, French, etc...These designations were not clear at that time, and arguably are malleable today
- What is a revolution? How was a revolution defined at that time, if it was, versus today?
- What is a "monarchy"?

Practical Politics

- Design: there are two processes associated with these politics
 - arriving at categories and standards
 - deciding what will be visible or invisible within the system
- What appears universal or standard is the result of negotiations, organizational processes, and conflict

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Classifications gone wrong...



Classifications gone wrong...

International classification of diseases (ICD)

- Argument about the ICD: "one can read a surprising amount of social, political, and philosophical context from a set of categories—and that in many cases the classification system in practice is all that we have to go on."
- Practical classifying: how people categorize objects they encounter in everyday situations, including formal classification schemes

Practices

- Let's turn to the ICD to illustrate practices:
 - When originally drawn up it had 200 categories
 - Not the number of diseases, but the number of lines on Austrian census forms
 - If too many diseases were identified, then there would be no way of maintaining and analyzing registers of causes of death—the technology would not hold more information

Medical classification split the world into useful categories: "they do not describe the world as it is in any simple case. They necessarily model it."

J09

Influenza due to identified zoonotic or pandemic influenza virus

Note: For use of this category, reference must be made to the guidelines of the Global Influenza Programme (GIP, www.who.int/influenza/) of WHO

Influenza caused by influenza virus strains of special epidemiological importance with an animal-human or inter-human transmission

Use additional code, if desired, to identify pneumonia or other manifestations.

Excl.: Haemophilus influenzae [H. influenzae]:

- infection NOS (A49.2)
- meningitis (G00.0)
- pneumonia (<u>J14</u>)

influenza due to identified seasonal influenza virus (J10.-)

J10	influenza due to identified seasonal influenza virus							
	Incl.: Influenza due to identified influenza B or C virus							
	Excl.:	 Excl.: Haemophilus influenzae [H. influenzae]: infection NOS (A49.2) meningitis (G00.0) pneumonia (J14) influenza due to identified zoonotic or pandemic influenza virus (J09) 						
J10.0	Influenza with pneumonia, seasonal influenza virus identified Influenzal (broncho)pneumonia, seasonal influenza virus identified							
J10.1	Influenza with other respiratory manifestations, seasonal influenza virus identified							
	Influenza Influenzal:		tion	seasonal influenza virus identified				
310.8	Influenza with other manifestations, seasonal influenza virus identified							
	Encephalopathy due to influenza Influenzal: • gastroenteritis • myocarditis (acute)		seas	seasonal influenza virus identified				

J11	Influenza, virus not identified							
	Incl.:	influenza viral influenza		ecific virus not stated to have been identified				
	 Excl.: Haemophilus influenzae [H. influenzae]: infection NOS (A49.2) meningitis (G00.0) pneumonia (J14) 							
J11.0	Influenza with pneumonia, virus not identified Influenzal (broncho)pneumonia, unspecified or specific virus not identified							
J11.1	Influenza with other respiratory manifestations, virus not identified Influenza NOS							
	Influenzal:			ion	unspecified or specific virus not identified			
J11.8	Influenza with other manifestations, virus not identified							
	Encephalopathy due to influenza Influenzal: • gastroenteritis • myocarditis (acute)			unspecified or specific virus not identified				

The Bertillon Classification of Causes of Death

- The history of the ICD is linked to the history of the formation of the modern state
- "Both the form and the implementation of the ICD have been influenced by development of information processing technology."
 - Form: the use of numeric codes was attached to the development of punch-card technology
 - Implementation: the U.S. coding of more than the single underlying cause of death was a failure before 1968 despite repeated attempts. Such coding became standard when an automated computerized system was implemented for the selection of the underlying cause of death

RULES TO BE OBSERVED IN DOUBTFUL CASES.

The following are the general rules which we have adopted for the solution of certain difficulties (most frequently caused by incomplete diagnosis, notably in the hospitals):

I. Incomplete Diagnosis.

- It is not the duty of a statistical office to interpret diagnosis (that is to say, to guess at what has been left incomplete). It can only register facts as they are formulated.
- When an organ affected with disease is not specified, the certificate should be entered under the title "other organs."

Example.—If the physician writes as cause of death "cancer," without specifying the organ attacked, the certificate should be classed under the tule of "cancer of other organs" (25 G),

3. An operation upon an organ (without specification of the cause which has necessitated the operation) leads us to suppose that the organ was diseased. Consequently, for lack of better information, a certificate in which the only cause of death noted is an operation upon an organ, should be recorded under the title "other diseases of this organ."

Enswyle.—Hysterotomy, given as a cause of death without other and more definite information implies a diseased aterus. Hence the certificate which conveys this information should be classed under the title "other diseases of the uterus" (12).

II. Doubtful Diagnosis.

 In doubtful cases, greater importance is attached to the seat of the disease than to its nature.

Ensuple.—For "abscess of the prostate" there is no special title: it should be classed under "discuses of the prostate" (101) and not under "abscess" (128).

The presence of a foreign body in an organ should be considered as a disease of that organ.

Etample—A foreign body in the bladder given as a cause of death should be classed under the bille "diseases of the bladder" (102). Nevertheless, a "foreign body in the larynx" or in the "traches" is to be considered as a cause of death by violence, and should be classed under that bille (152).

III. Choice Between Two Simultaneous Diagnoses.

Another question remains to be decided. It very often happens that two diseases are named at the same time as the causes of death: to which of these causes should the deaths be attributed? The following rules are presented to solve this question:

 When death is attributed simultaneously to two diseases, it should first be ascertained whether one is not a complication. If this is found to be the case, then the death must be classified under the primary cause.

Examples.—Measles and convulsions, compile as measles; measles and broncho-pneumona, compile as measles; scarlet fever and diphtheria, compile as scarlet fever; scarlet fever and columnsia, compile as scarlet fever; scarlet fever and columnsia, compile as scarlet fever; diabetes and bronchitis, compile as diabetes; typhoid fever and pulmonary congestion, conjule as typhoid fever; whooping cough; and pneumonia, compile as whooping cough; cerebral homorchage and homipiegia compile as cerebral hemorchage; felon and purulent infection, compile as felon.

2. If it is not absolutely certain (as in the preceding cases) that one of these diseases is the result of the other, the question should be settled whether there is not a considerable difference in the severity of the two diseases, and then the death should be recorded under the title of the more dangerous disease.

• To complicate things further, the consistent finding of the history of science is that there is no natural or universal classification systems: "classifications that appear natural, eloquent, and homogeneous within a given human context appear forced and heterogeneous outside of that context."

Questions

- To recall the authors' initial question: What is classifications social or cultural significance and power?
- How would the authors distinguish between classification work and classification schema? How do you define them?
- Throughout the book, the authors turn to notions of "inversion" and how that impacts or defines classification systems. In what way is this reminiscent of the actor-network theory?