Improving Cross-national/cultural Comparability
Using the Total Survey Error Paradigm

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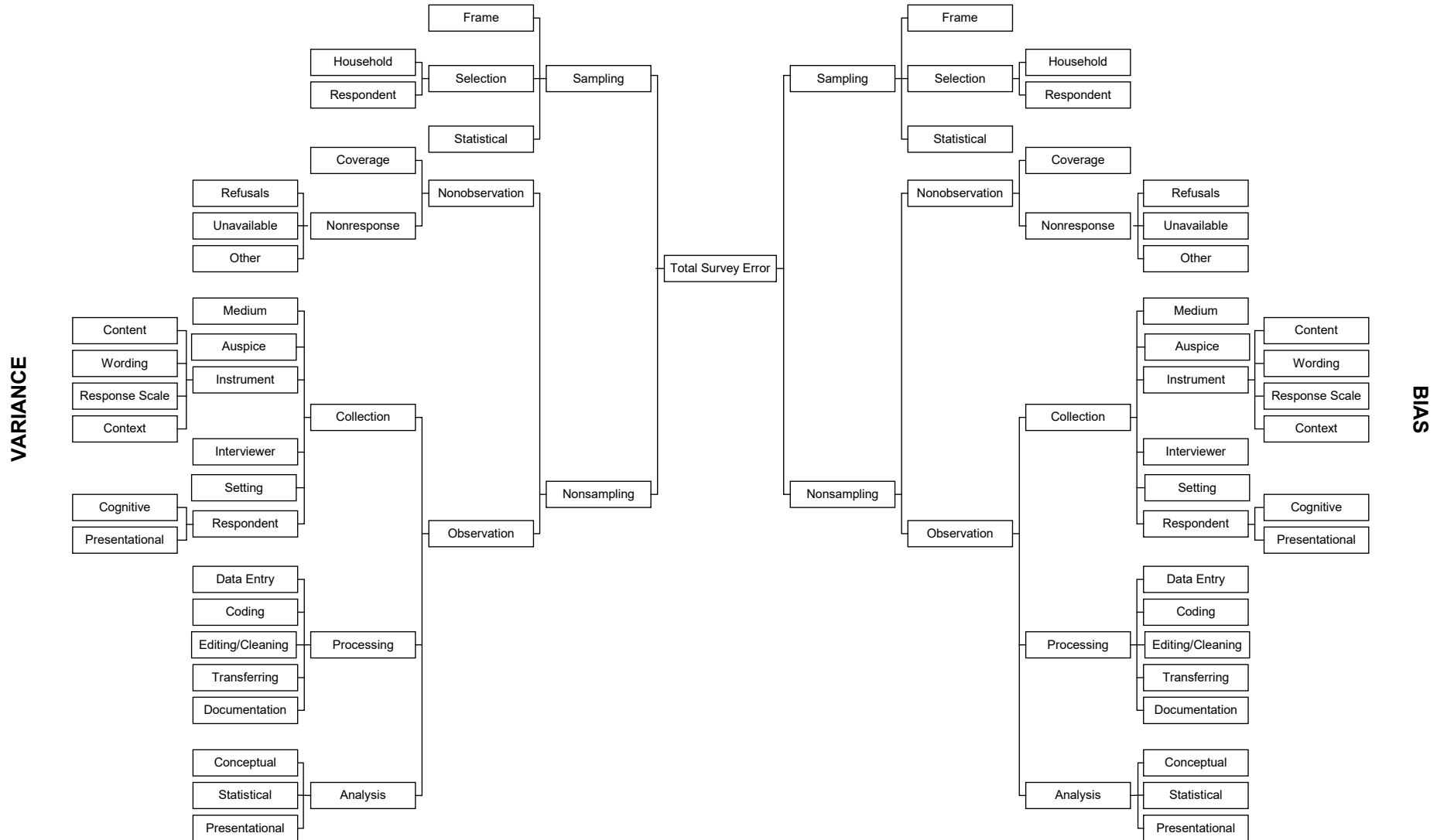## July 25-29, 2016, Chicago
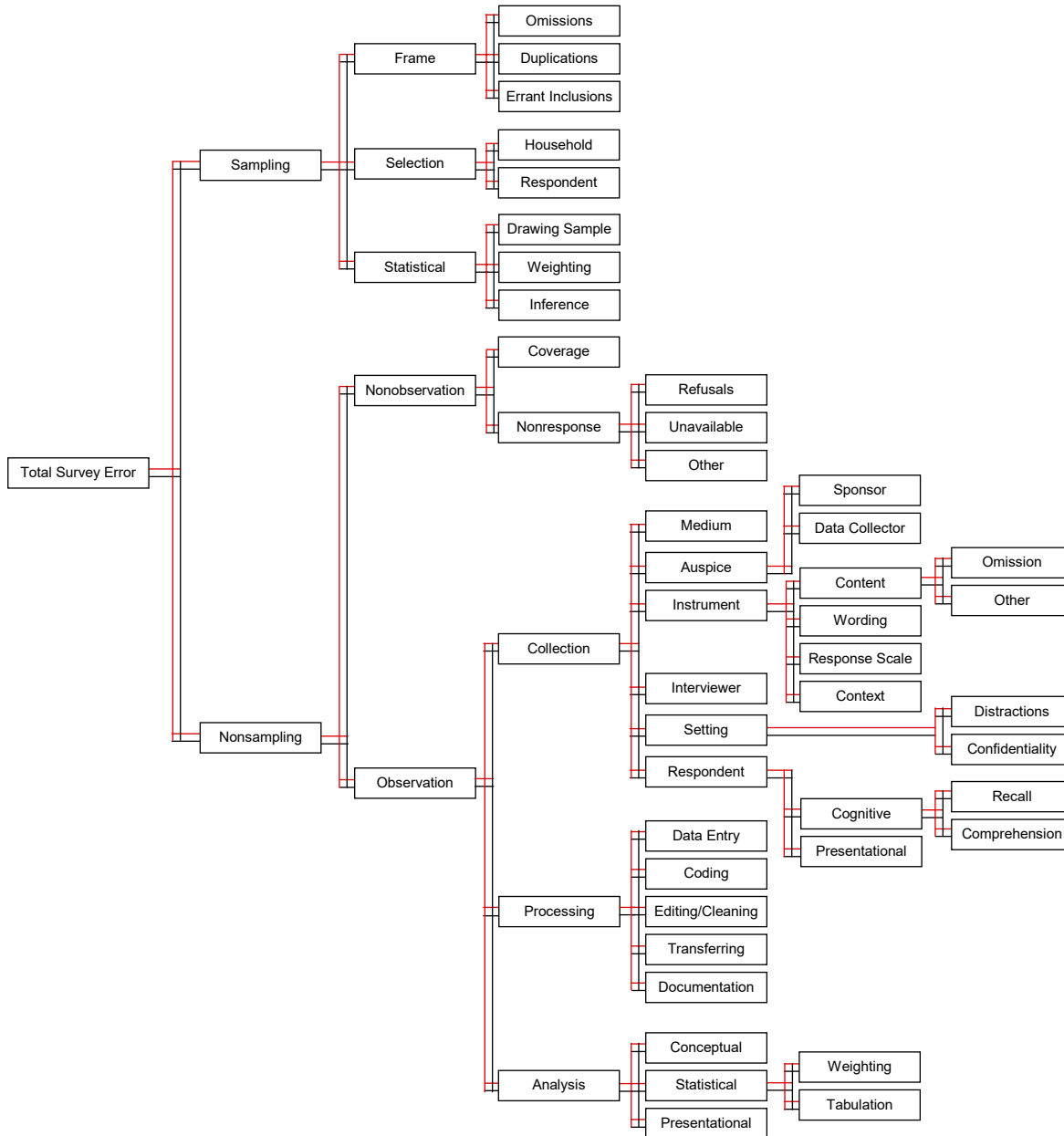
Figure 1. Total Survey Error: Total Error

VARIANCE

BIAS

Figure 2: TSE

Figure 3A: Categorizing Nonresponse Error

Level of Nonresponse

		Unit	Supplement/ SAQ	Item
	Refusal	Refuse survey	Refuse supp./ SAQ	Refuse question
Reason for Nonresponse	Unavailable	Noncontact	Null	Null
	Other	Illness, Lost case	Illiterate, Poor eyesight	Cognitively unable

Figure 3B: Typology of Surveys by Medium

	Computer		No Computer	
	Interviewer	Self-Admin.	Interviewer	Self-Admin.
Visual	Null	Internet CASI	Null	Postal Classroom handout
Audio	CAPI CATI	Automated voice+ voice recognition	PAPI TI	Null
Mixed	CAPI+show cards	Automated voice+ touchtone response ACASI	PAPI+show cards	TI+show cards TI+diary PAPI+SAQ

ACASI=audio computer-assisted self-interview
CAPI=computer-assisted personal interview
CASI=computer-assisted self-interview
CATI=computer-assisted telephone interview
Null=rare or non-existent
PAPI=paper and pencil interview
SAQ=self-administered questionnaire
TI=telephone interview
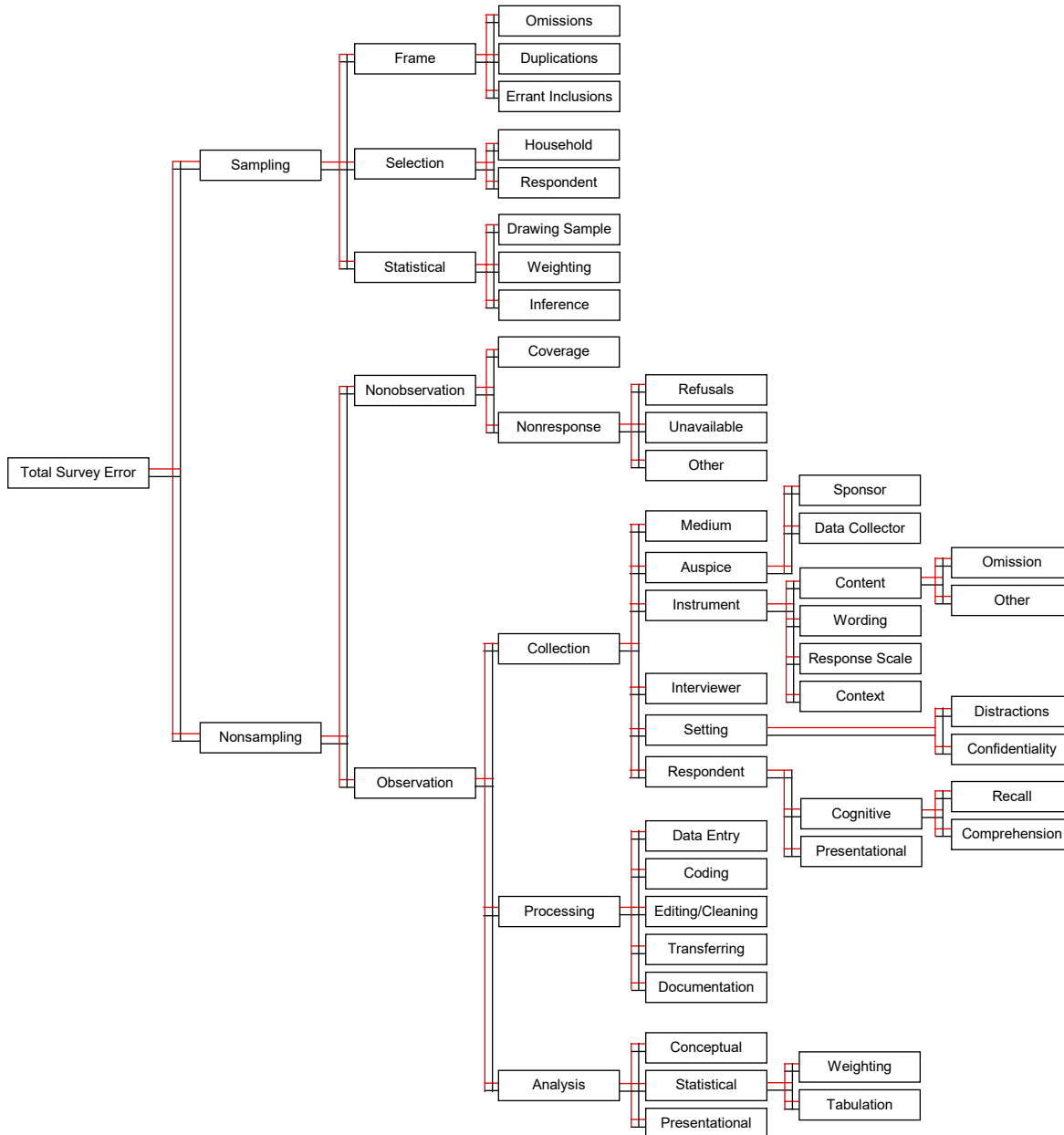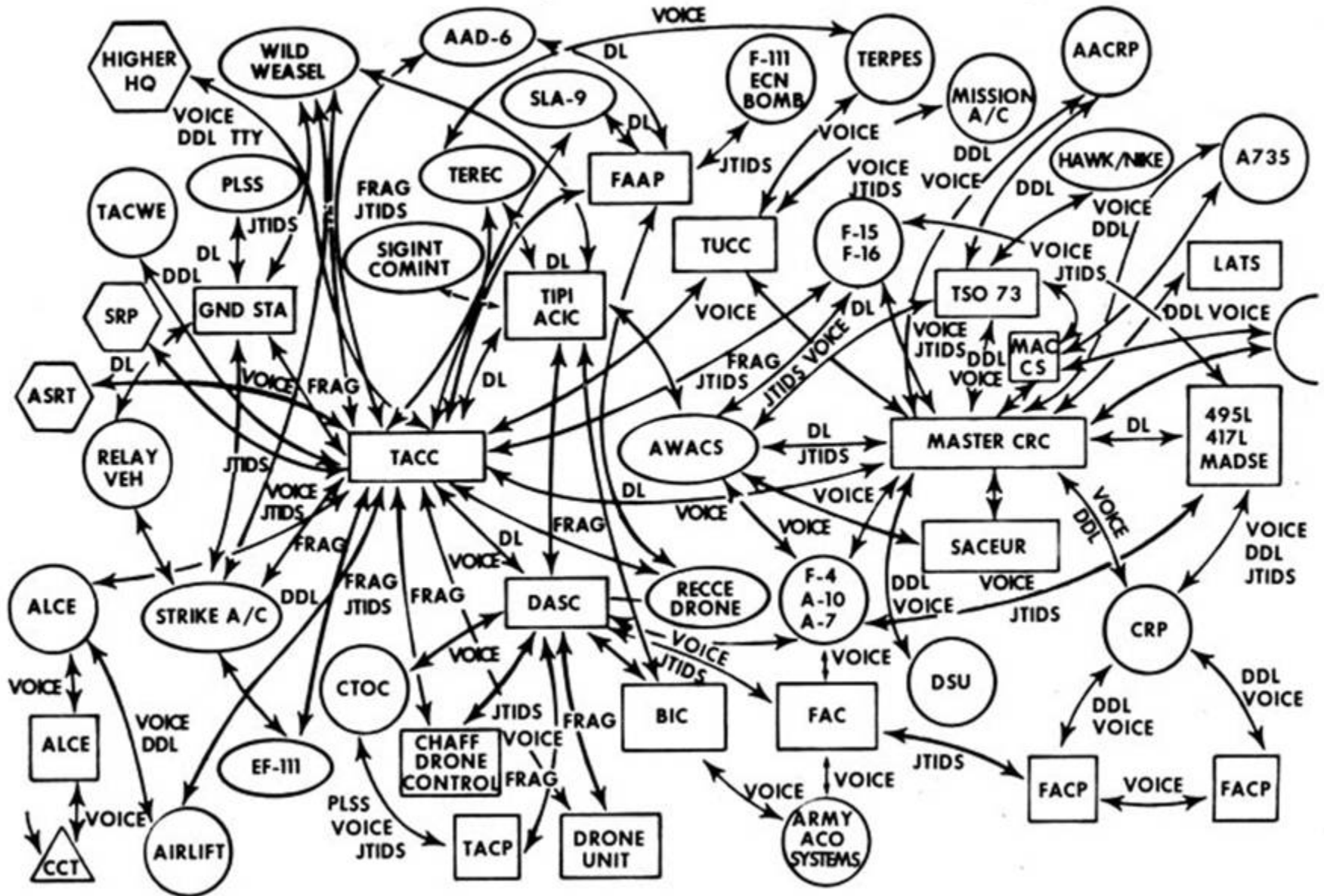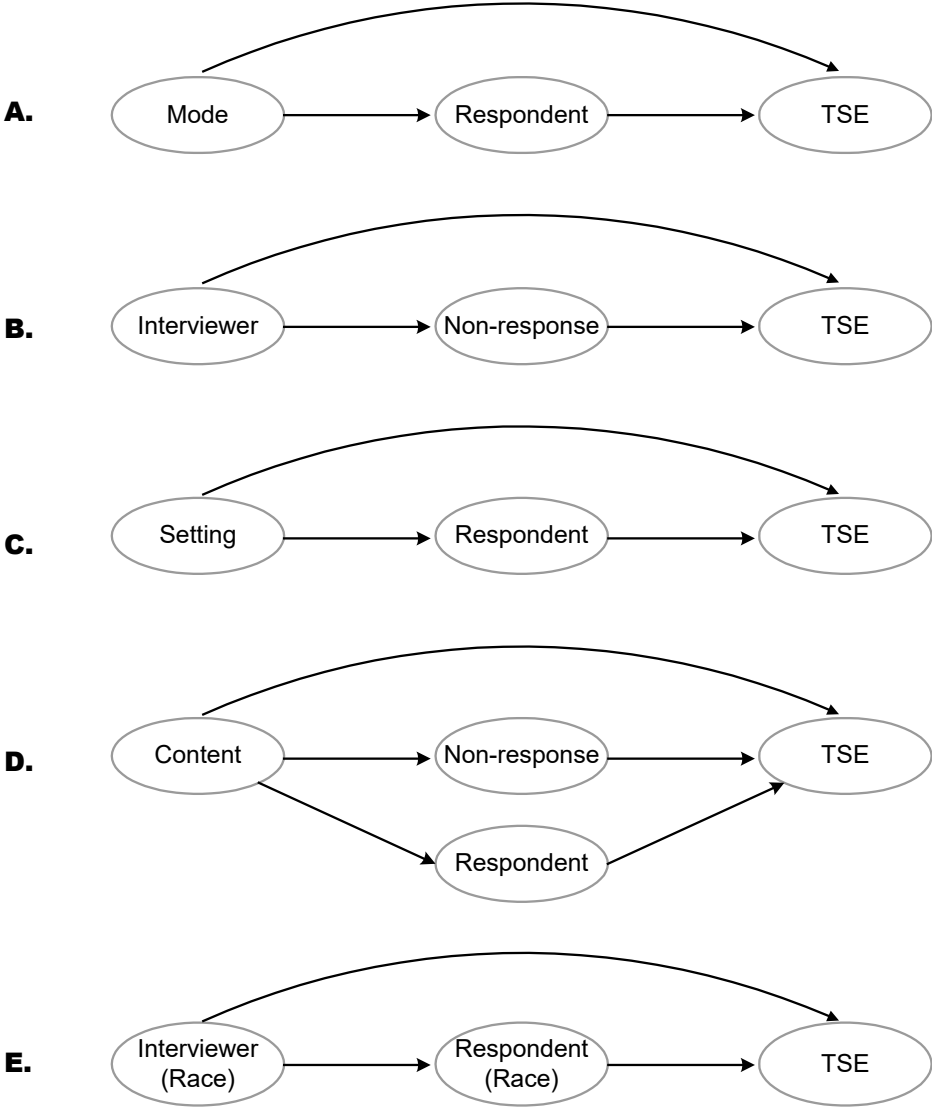
Figure 2: TSE: Interactions

CHART 5.4
Essential Communications Linkages for a Modern Force Multiplication Scheme

Interactions with TSE

TSE and Multiple Surveys
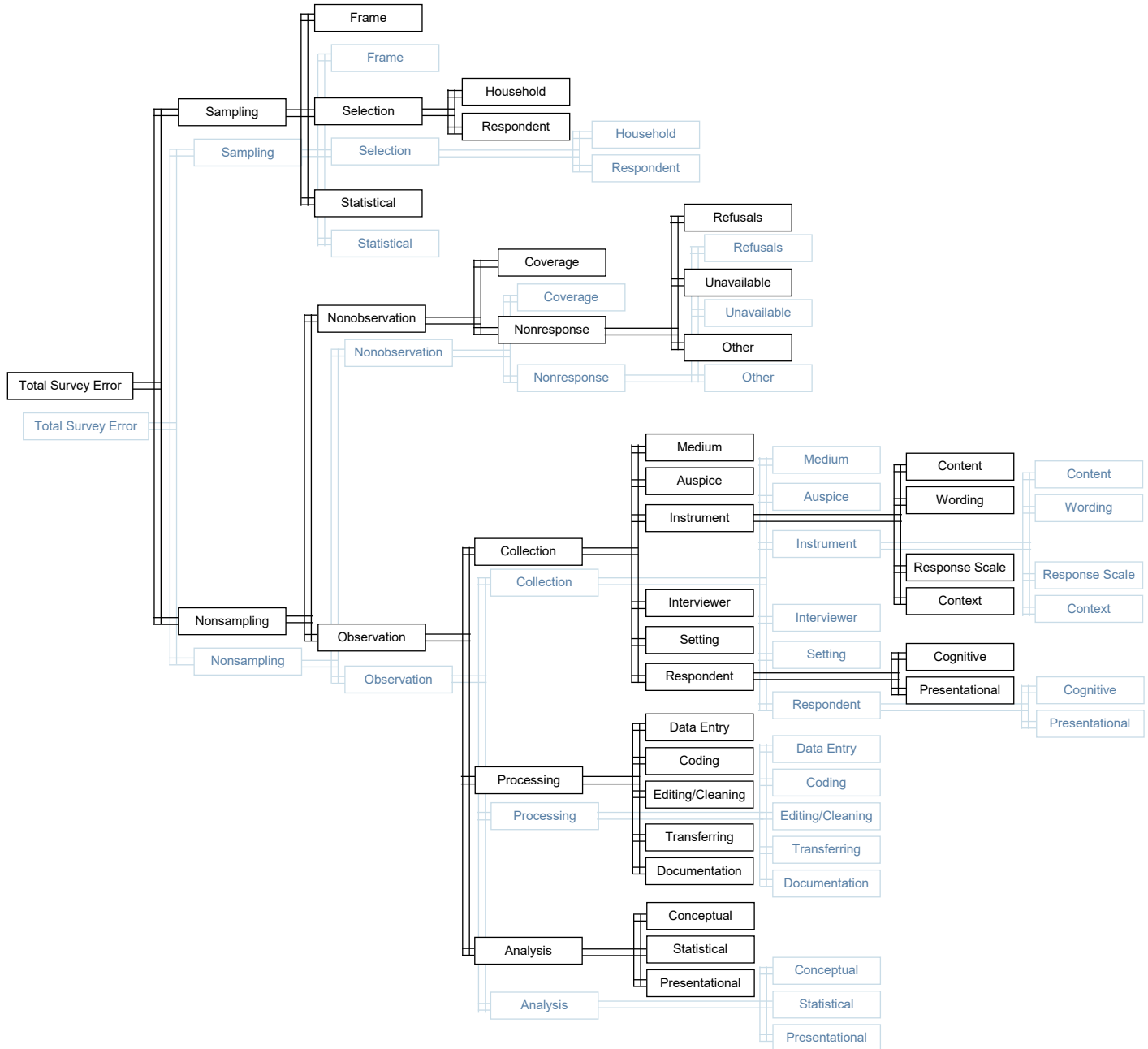
Times Series

Panel Waves

Comparative

       Cross-National/Cross-Cultural
       Other

Figure 4: TSE and Multiple Surveys

Uses of TSE in Comparative Perspective

The TSE paradigm is a valuable approach for comparative studies for several reasons.

First, it is a blueprint for designing studies. Each component of error can be considered with the object of minimizing comparison error.

Second, it is a guide for evaluating error after the surveys have been conducted. One can go through each component and assess the level and comparability of the error structures.

Third, it can set a methodological research agenda for study error and for the design of experiments and other studies to fulfill that agenda.

Fourth, it goes beyond examining the separate components of error and provides a framework for the combining of the individual error components into their overall sum.

Fifth, by considering error as an interaction across surveys, it establishes the basis for a statistical model for the handling of error across surveys.

Figure 4: TSE and Multiple Surveys
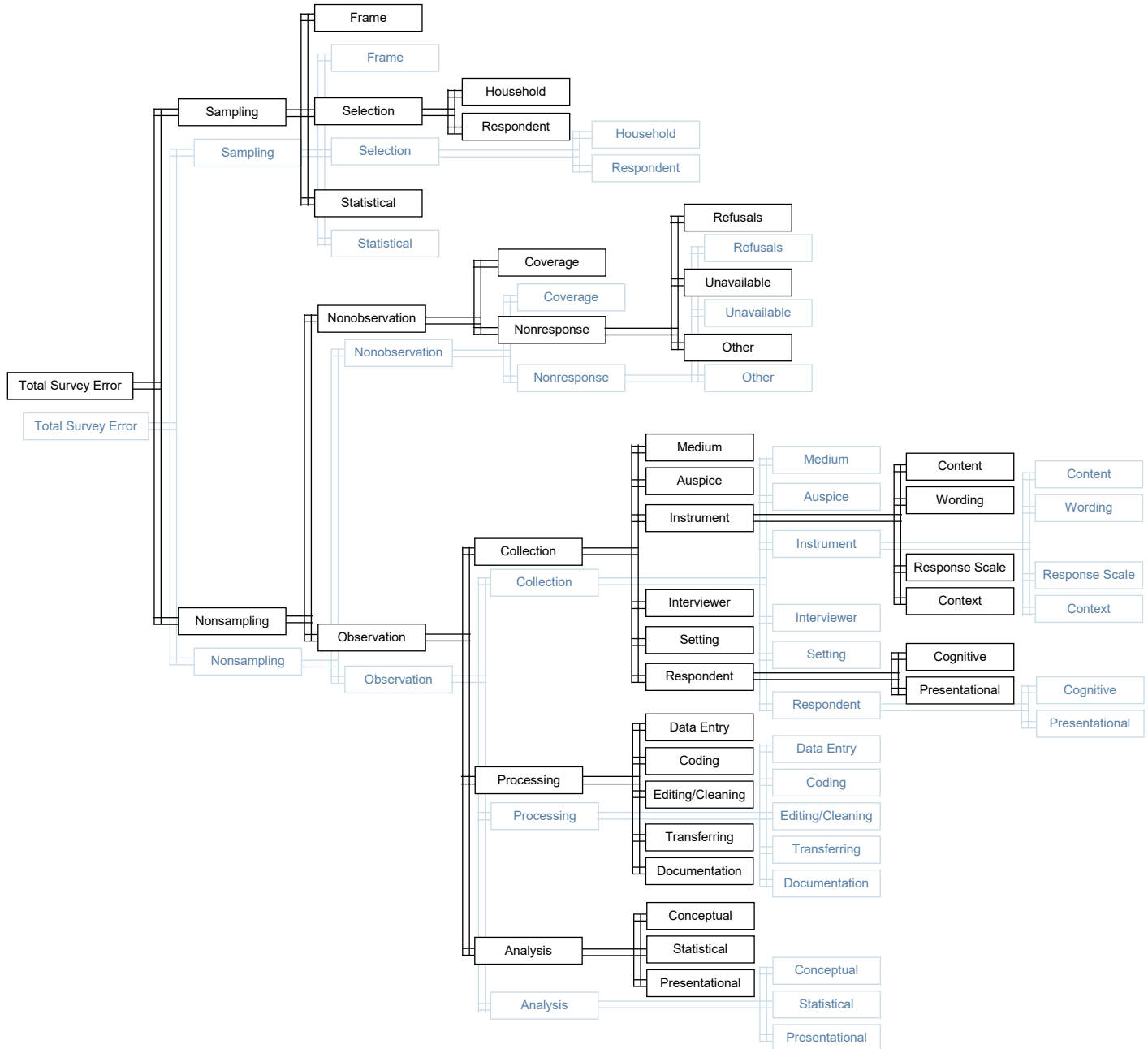
Combining TSE with Traditional Functional Equivalence Approach

➢ Focusing on most important cases of comparison error
➢ Focusing on comparability
➢ Etic vs. Emic
➢ Comparability of scales