

Heterogeneities according to Bergman

Class	Category	Subcategory
STRUCTURAL	Naming	Case Sensitivity
		Synonyms
		Acronyms
		Homonyms
	Generalization / Specialization	
	Aggregation	Intra-aggregation
		Inter-aggregation
	Internal Path Discrepancy	
	Missing Item	Content Discrepancy
		Attribute List Discrepancy
Missing Attribute		
Missing Content		
Element Ordering		
Constraint Mismatch		
Type Mismatch		
DOMAIN	SchematicDiscrepancy	<u>Element-value to Element-label Mapping</u>
		<u>Attribute-value to Element-label Mapping</u>
		<u>Element-value to Attribute-label Mapping</u>
		<u>Attribute-value to Attribute-label Mapping</u>
	Scale or Units	
	Precision	
DATA	DataRepresentation	Primitive Data Type
		Data Format
	Naming	Case Sensitivity
		Synonyms
		Acronyms
		Homonyms
ID Mismatch or Missing ID		
Missing Data		
<u>Incorrect Spelling</u>		
LANGUAGE	Encoding	Ingest Encoding Mismatch
		<u>Ingest Encoding Lacking</u>
		Query Encoding Mismatch
		<u>Query Encoding Lacking</u>
	Languages	Script Mismatches
		Parsing / Morphological Analysis Errors (many)
		Syntactical Errors (many)
Semantic Errors (many)		

- « Bergman uses the classification system of Pluempitiwiriyawej and Hammer who were then working on heterogeneities in XML data sources. This classification exposes about 20 categories and about 40 subcategories of distinct heterogeneities. »

BERGMAN, M. Sources and classification of semantic heterogeneities. Web Blog: AI3-Adaptive Information, Adaptive Innovation, Adaptive Infrastructure, 2006.

PLUEMPITIWIIRIYAJEJ, Charnyote et HAMMER, Joachim. A classification scheme for semantic and schematic heterogeneities in XML data sources. TR00-004, University of Florida, Gainesville, FL, 2000.