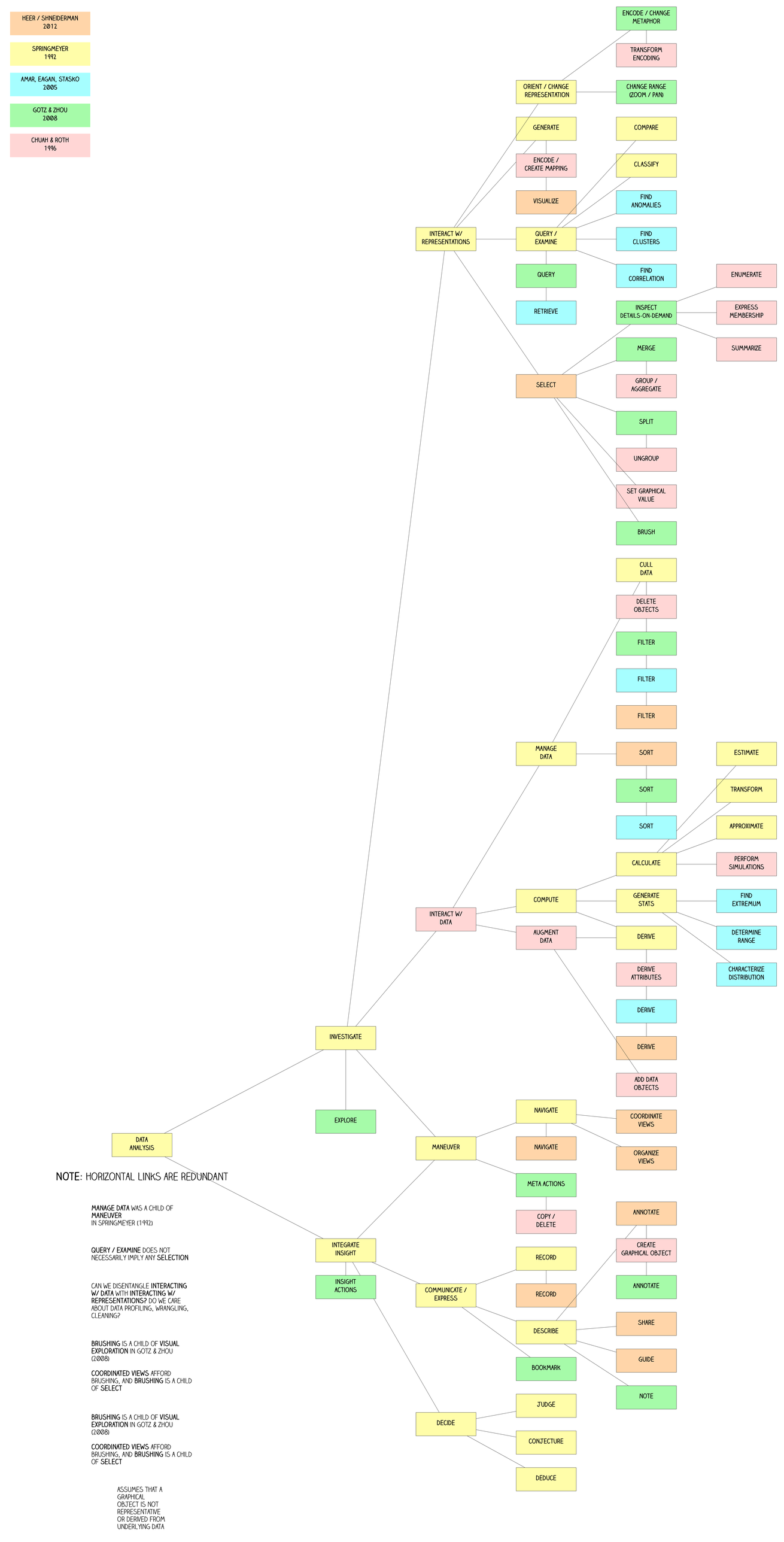
HEER / SHNEIDERMAN 2012
SPRINGMEYER 1992
AMAR, EAGAN, STASKO 2005
GOTZ & ZHOU 2008
CHUAH & ROTH 1996
ENCODE / CHANGE METAPHOR
TRANSFORM ENCODING
ORIENT / CHANGE REPRESENTATION
CHANGE RANGE (ZOOM / PAN)
GENERATE
COMPARE
ENCODE / CREATE MAPPING
CLASSIFY
VISUALIZE
FIND ANOMALIES
INTERACT W/ REPRESENTATIONS
QUERY / EXAMINE
FIND CLUSTERS
QUERY
FIND CORRELATION
RETRIEVE
INSPECT DETAILS-ON-DEMAND
ENUMERATE
EXPRESS MEMBERSHIP
SUMMARIZE
MERGE
SELECT
GROUP / AGGREGATE
SPLIT
UNGROUP
SET GRAPHICAL VALUE
BRUSH
CULL DATA
DELETE OBJECTS
FILTER
FILTER
FILTER
MANAGE DATA
SORT
ESTIMATE
SORT
TRANSFORM
SORT
APPROXIMATE
CALCULATE
PERFORM SIMULATIONS
COMPUTE
GENERATE STATS
FIND EXTREMUM
INTERACT W/ DATA
AUGMENT DATA
DERIVE
DETERMINE RANGE
DERIVE ATTRIBUTES
CHARACTERIZE DISTRIBUTION
DERIVE
DERIVE
ADD DATA OBJECTS
INVESTIGATE
NAVIGATE
COORDINATE VIEWS
EXPLORE
NAVIGATE
ORGANIZE VIEWS
DATA ANALYSIS
MANEUVER
META ACTIONS
COPY / DELETE
ANNOTATE
INTEGRATE INSIGHT
RECORD
CREATE GRAPHICAL OBJECT
INSIGHT ACTIONS
RECORD
ANNOTATE
COMMUNICATE / EXPRESS
DESCRIBE
SHARE
GUIDE
BOOKMARK
NOTE
JUDGE
DECIDE
CONJECTURE
DEDUCE
NOTE: HORIZONTAL LINKS ARE REDUNDANT
MANAGE DATA WAS A CHILD OF MANEUVER IN SPRINGMEYER (1992)
QUERY / EXAMINE DOES NOT NECESSARILY IMPLY ANY SELECTION
CAN WE DISENTANGLE INTERACTING W/ DATA WITH INTERACTING W/ REPRESENTATIONS? DO WE CARE ABOUT DATA PROFILING, WRANGLING, CLEANING?
BRUSHING IS A CHILD OF VISUAL EXPLORATION IN GOTZ & ZHOU (2008)
COORDINATED VIEWS AFFORD BRUSHING, AND BRUSHING IS A CHILD OF SELECT
BRUSHING IS A CHILD OF VISUAL EXPLORATION IN GOTZ & ZHOU (2008)
COORDINATED VIEWS AFFORD BRUSHING, AND BRUSHING IS A CHILD OF SELECT
ASSUMES THAT A GRAPHICAL OBJECT IS NOT REPRESENTATIVE OR DERIVED FROM UNDERLYING DATA