CODEBOOK AND CODING NOTES FOR ARCHAEOLOGICAL VARIABLES

VERSION 5.2 (August 19, 2016)

This revision of the codebook again focuses on the event codes, and these are the only ones that have been changed in this version. Specifically, variables AR-ST-5, AR-ST-6, AR-ST-7, and AR-ST-8 have been converted into five-point scales.

The old versions of these scales are now AR-ST-9, AR-ST-10, AR-ST-11, and AR-ST-12.

Variables used in the Index scales are also included, along with a list of all the cases.

The codebook used for initial coding and analysis of the GL, AB, and SW cases was Version 3. The original coded data for these cases are stored in SPSS files AR\_DT\_V3.sav and AR\_ST\_V3.sav. The GL, AB, and SW cases have been subsequently updated to reflect changes in Versions 4 and 5 of the codebook.

SUBSISTENCE VARIABLES

George P. Murdock and Diana O. Morrow. 1970. “Subsistence Economy and Supportive Practices.” ETHNOLOGY 9:302-330.

OCMS: 220, 230, 240, 251, 252, 262, 432, 438, 439

AR-SV-1. INTERCOMMUNITY TRADE AS FOOD SOURCE

Code:

1 = No Trade

2 = Food Imports absent although trade present

 Food Imports present, and contribute:

3 = Salt or Minerals only

4 = < 10% of food (90% form local extractive sources)

5 = < 50% of food, and less than any single local source

6 = < 50% of food, and more than any single local source

7 = > 50% of food

77 = food imports present, but unable to calculate percentage

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

AR-SV-3. CROPS- PRINCIPAL

Code:

0 = No crops

\_\_ = Count of the following Orders cultivated:

\_\_ Cereals (Order: *Poales*)

\_\_ Legumes (Order: *Fabales*)

\_\_ Vegetables (Order: *Solanales*)

\_\_ Squashes (Order: *Curcurbitales*)

\_\_ Regionally important subsistence plants: yam [Order: *Dioscoreales*];
taro [Order: *Alismatales*];
cassava [Order: *Malpighiales*];
amaranth [Order: *Caryophyalles*];
banana [Order: *Zingiberales*];
coconut [Order: *Arecales*]

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Only code for subsistence crops; i.e. those that form a primary parts of the diet. Orders of secondary foods or drug foods should not be coded.

AR-SV-5. ANIMALS- DOMESTICATED

Code:

0 = no domesticated subsistence animals

\_\_ = Count of the following Orders:

\_\_ Sheep, cattle, pig, llama, camel (Order: *Artiodactyla*)

\_\_ Horse, donkey (Order: *Perissodactyla*)

\_\_ Rodents (Order: *Rodentia*)

\_\_ Ground-feeding birds (Order: *Galliformes*)

\_\_ Waterfowl (Order: *Anseriformes*)

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Only code for subsistence animals; i.e. those that form a primary parts of the diet. Orders of purely companion or working animals should not be coded.

Chickens and turkeys are ground-feeding birds; ducks and geese are waterfowl.

Guinea pigs and rabbits are rodents.

AR-SV-7. FISH

Code:

0 = no fishing/shellfishing

1 = Shellfish

2 = True fish

3 = Aquatic animals

4 = Two or more of above

5 = All of the above

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

AR-SV-9. ANIMALS HUNTED

Code:

0 = no hunting

1 = Birds or Waterfowl

2 = Small Mammals

3 = Large Game

4 = Two or more of above

5 = All of the above

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

AR-SV-11. GATHERED FOODS

Code:

0 = no gathered foods

\_\_ = Count of the following:

\_\_ Wild Animal products

\_\_ Wild Herbs, Leaves, Blossoms

\_\_ Tree Pith, e.g., Sago

\_\_ Wild Roots or Tubers

\_\_ Wild Fruit, seeds, nuts, berries

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

AR-SV-12. FOOD STORAGE

Code:

1 = None

2 = Individual households

3 = Communal facilities

4 = Political agent controlled repositories

5 = Economic agent controlled repositories

6 = Two or more of the above

7 = Three or more of the above

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

The presence of ceramics implies food storage, so code 2 (unless there are larger facilities).

The presence of pits within houses implies food storage, so code 2 (unless there are larger facilities).

Both of the above are true for both single and multi-family households; i.e. storage within a multi-family household does not constitute communal facilities.

AR-SV-13. FOOD SUPPLY (ECOLOGICAL OR DISTRIBUTION NETWORK)

Code:

1 = Year-round food supply locally

2 = Daily variation in food supply

3 = Seasonal variation

4 = Annual variation

5 = Imported food supply

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

This variable focuses on preservation and storage of food as food acquisition; the issue is the degree to which people have access to food:

1: food resources used are notably constant

2: chance factors (such as the success of hunters) makes daily variation in access to food possible, but not necessarily routine

3: food access varies markedly from season to season; e.g. there is a dry season where both plant and animal foods are scarce, or there is a period of time between planting and harvesting where food is often scarce.

4: marked variations in food supply that effect an entire year (e.g. due to droughts, natural disasters, and the like) occur often.

5. most food is obtained through trade

POLITICAL ECONOMY VARIABLES

OCMS: 554, 560, 571, 595, 620, 640, 651, 653, 660, 764, 766

AR-PE-1 (PEB1) Leaders are buried with special goods or markers for their importance (special places for burials and/or special markers and/or goods).

Code:

0=egalitarian/no formal leader

1=almost never

2=occasionally

3=frequently

4=almost always

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Societies whose highest level leaders are village headmen, big men, or the like, who have no formal means of controlling behavior or resources other than their own charisma, oratory, cajoling, or modeling desired behavior should be coded as egalitarian=0

AR-PE-3 (PEB2) How much effort are the burials of leaders?

Code:

0=egalitarian/no formal leaders

1=very low, similar to others

2=moderately low, different from commoners

3=moderately high, similar to other leaders

4=very high, different from everyone

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Societies whose highest level leaders are village headmen, big men, or the like, who have no formal means of controlling behavior or resources other than their own charisma, oratory, cajoling, or modeling desired behavior should be coded as egalitarian=0

AR-PE-4 (PET1) Leaders levy taxes, whether in money, in kind, in labor (an obligatory communal fish harvest or corn harvest that accrues immediately and directly to all participants is not a tax).

Code:

1= none

2= light

3= moderate

4= heavy

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

AR-PE-6 (PET2) Who are the direct recipients of the tax action?

Code:

1= no taxes

2= all members of society

3=elites, ritual specialists, and other government entities (e.g. military)

4= elites and ritual specialists

5= elites only

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

AR-PE-9 (PEF1) Leader attempts to form large families by having multiple marriages and/or concubines.

Code:

0=egalitarian/no formal leaders

1=no

2=somewhat

3=considerably

4=absolutely

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Societies whose highest level leaders are village headmen, big men, or the like, who have no formal means of controlling behavior or resources other than their own charisma, oratory, cajoling, or modeling desired behavior should be coded as egalitarian=0.

If leadership is based on position in a kin group, but the leader has formal influence only over the kin group itself, and/or has no formal means of controlling those outside of the kin group, then the case should be coded as egalitarian = 0.

AR-PE-10 (PEF2) The leader's family or kin group is promoted in rhetoric or iconography, and/or is used to rule over other kin groups.

Code:

0=egalitarian/no formal leaders

1=relatively little

2=somewhat

3=considerably

4=almost absolutely

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Societies whose highest level leaders are village headmen, big men, or the like, who have no formal means of controlling behavior or resources other than their own charisma, oratory, cajoling, or modeling desired behavior should be coded as egalitarian=0

If there are ranked kin groups but leaders have no formal power outside of the kin group, then the case should be coded egalitarian=0.

AR-PE-11 (PEC1). Extent of leaders’ role in ritual/religion.

Code:

1= shamans / ritual specialists present but may not be leaders

2= limited

3=moderate

4= substantial

5= exclusive

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

AR-PE-12 (PEC2) Leaders promote an ideology stressing the collectivity and interdependence of society.

Code:

0=egalitarian/no formal leaders

1=strongly

2=somewhat strongly

3=mildly

4=does not

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Societies whose highest level leaders are village headmen, big men, or the like, who have no formal means of controlling behavior or resources other than their own charisma, oratory, cajoling, or modeling desired behavior should be coded as egalitarian=0

AR-PE-13 (PEC3). Roles and statuses reduce competition and emphasize everyone’s place in the society or social system.

Code:

0=status distinctions not present

1=strongly

2=somewhat strongly

3=mildly

4=weakly or never

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Societies whose highest level leaders are village headmen, big men, or the like, who have no formal means of controlling behavior or resources other than their own charisma, oratory, cajoling, or modeling desired behavior should be coded as not having status distinctions=0

The presence of shamans does not indicate status distinctions.

AR-PE-14 (PEC4). There is renewal of societal values and collective representations in ritual.

Code:

1=very strong

2=moderate

3=some

4=little or no

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

AR-PE-15 (PEA1): Differentiation among leaders and followers

Code:

0=egalitarian/no formal leaders

1=none

2=leaders have some privileges and/or access to resources others do not

3=leaders have extensive privileges and access to resources others do not, including special housing and sumptuary goods

4=leaders have exclusive privileges and exclusive access to special housing, resources, and sumptuary goods

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Societies whose highest level leaders are village headmen, big men, or the like, who have no formal means of controlling behavior or resources other than their own charisma, oratory, cajoling, or modeling desired behavior should be coded as egalitarian=0

AR-PE-16 (PEA2): Leader identification

Code:

0=egalitarian/no formal leaders

1=none

2=leaders are identified by treatment or appearance

3=leaders are identified by recognized symbols of power or special behaviors

4=individual aggrandizement and/or cult of leaders

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Societies whose highest level leaders are village headmen, big men, or the like, who have no formal means of controlling behavior or resources other than their own charisma, oratory, cajoling, or modeling desired behavior should be coded as egalitarian=0

AR-PE-17 (PEA3): Sharing of authority

Code:

0=egalitarian/no formal leaders

1=leaders share power extensively with others

2=leaders share power with a large cadre of other leaders

3=leaders share power with a few other leaders

4=leaders exercise exclusive power

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Societies whose highest level leaders are village headmen, big men, or the like, who have no formal means of controlling behavior or resources other than their own charisma, oratory, cajoling, or modeling desired behavior should be coded as egalitarian=0

AR-PE-18 (PEA4): Emphasis of authority

Code:

0=egalitarian/no formal leaders

1=emphasis placed on group solidarity and group survival

2=emphasis shared between group and leader, with greatest importance given to group survival

3=emphasis shared between group and leader, with greatest importance given to leader survival

4=emphasis placed on leaders as the embodiment of the group

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Societies whose highest level leaders are village headmen, big men, or the like, who have no formal means of controlling behavior or resources other than their own charisma, oratory, cajoling, or modeling desired behavior should be coded as egalitarian=0

AR-PE-19 (PEA5): External contacts (excluding warfare)

Code:

0=egalitarian/no formal leaders

1=few or unimportant

2=external contacts are part of leaders’ authority, but not exclusive

3=external contacts are key to leaders’ authority, but not exclusive

4=external contacts are exclusively controlled by leaders

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

The focus of this variable is on the leader’s role in external contact, not on the external contacts themselves.

TIGHTNESS/LOOSENESS COMMUNITY COHESION VARIABLES

George P. Murdock and Suzanne F. Wilson. 1972. “Settlement Patterns and Community Organization.” ETHNOLOGY 11: 254-295.

OCMS: 340, 360, 621, 626, 628, 788, 796

AR-TL-1. FIXITY OF SETTLEMENT

Code:

1 = Migratory

2 = Seminomadic- fixed then migratory

3 = Rotating among 2+ fixed

4 = Semisedentary- fixed core, some migratory

5 = Impermanent- periodically moved

6 = Permanent

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Migratory (1) means temporary camps all year long.

Seminomadic (2) means temporary camps most of the year but with one or more seasonal camps (e.g. recurrently occupied fall fishing encampment).

Rotating (3) means two or more permanent or semi-permanent camps occupied seasonally.

Semi-sedentary (4) means some people occupy a primary community all year, though a substantial part of that community leave for part of the year.

AR-TL-2. COMPACTNESS OF SETTLEMENT

Code:

1 = Dispersed

2 = Spatially separated subsettlements

3 = Partially dispersed with central core

4 = Compact

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Villages with defensive works or palisades should be coded compact = 4.

AR-TL-3. LARGE OR IMPRESSIVE STRUCTURES

Code:

1 = None

2 = Residences of influential individuals

3 = Secular or public building(s)

4 = Religious or ceremonial building(s)

5 = Military structure(s)

6 = Economic or industrial building(s)

7 = Two or more of the above

8 = Three or more of the above

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Code the largest or most impressive structure. Other structures should be described in the notes.

AR-TL-4. HOUSEHOLD FORM

Code:

1 = Large communal structures

2 = Multi-family dwellings

3 = Single family dwellings

4 = Family homestead

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

The distinction between 3 and 4 is as follows:

--single-family dwellings are generally part of a larger community, and consist only of the dwelling;

--family homesteads are more independent, having individual outbuildings for extended family members, servants, animals, etc.

AR-TL-5. COMMUNITY INTEGRATION

Code:

1 = Lacking or low compared to community segments or larger polity

2 = By common residence only

3 = Common Identity, dialect, subculture

4 = Overlapping Kin ties

5 = Common social or economic status

6 = Common political ties

7 = Common religious ties

8 = Two or more of the above

9 = Three or more of the above

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Code the most important source of community integration. Additional sources of integration should be listed and explained in the notes.

AR-TL-6. PROMINENT COMMUNITY CEREMONIALS

Code:

1 = Rites of passage

2 = Calendrical

3 = Magical or religious

4 = Individual sponsored and communally attended (e.g., potlatch)

5 = Two or more of the above

6 = Three or more of the above

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Code the community ceremonial that has the most participants and/or the one that is the most frequent. Additional ceremonies should be listed and described in the notes.

Formal burials with grave goods or in mounds/charnel features/ossuaries should be coded 3.

AR-TL-7. CEREMONIAL ELEMENTS

Code:

1 = Feasting and/or drinking

2 = Exchanges other than food

3 = Entertainment

4 = Sacrifice other than human

5 = Human sacrifice

6 = Masochistic behavior

7 = Two or more of the above

8 = Three or more of the above

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Code the most common ceremonial element and/or the one experienced by the largest segment of the population.

Additional elements should be listed and described in the notes.

Additional variables

AR-TL-8 POLITICAL INTEGRATION

(Murdock, George P., and Caterina Provost. 1971. “The Measurement of Cultural Complexity,” ETHNOLOGY 12:379-392.)

Code:

1 = None

2 = Autonomous local communities

3 = 1 level above community

4 = 2 levels above community

5 = 3 levels above community

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

This variable focuses on political / jurisdictional hierarchy. Communities that are egalitarian are by definition autonomous (2).

Code the highest level of integration.

A code of 1 indicates a fluid community as in nomadic bands where community membership shifts regularly.

AR-TL-9 Name of largest community.

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

AR-TL-10 Size in hectares of largest community.

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

AR-TL-11 Estimated population of largest community.

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

TIGHTNESS/LOOSENESS COMMUNITY UNIFORMITY VARIABLES

OCMS: 290, 301, 340, 410

AR-TL-13. To what extent is personal ornament standardized?

Code:

0 = no personal ornament

1 = Unstandardized

2 = Moderately unstandardized

3 = Moderately standardized

4 = Standardized

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Unstandardized (1) means that there are no generally employed forms or patterns.

Moderately unstandardized (2) means that there are generally employed forms or patterns, but that individuals make them so there is individual variation, or that there is a wide diversity within those general forms.

Moderately standardized (3) means that there are generally employed forms or patterns that manufactured in common ways. Modern mass-produced clothing, for example, would be coded as moderately standardized.

Standardized (4) means that there is a universal form or pattern that all follow. Uniforms, for example, are standardized.

Coding should be done for the most common or most broadly used items. A society with moderately standardized clothing but some uniforms should be coded as moderately standardized. In other words, the typical items should be coded.

AR-TL-15. To what extent are “fineware” ceramics standardized?

Code:

0 = no fineware ceramics

1 = Unstandardized

2 = Moderately unstandardized

3 = Moderately standardized

4 = Standardized

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Unstandardized (1) means that there are no generally employed forms or patterns.

Moderately unstandardized (2) means that there are generally employed forms or patterns, but that individuals make them so there is individual variation, or that there is a wide diversity within those general forms.

Moderately standardized (3) means that there are generally employed forms or patterns that manufactured in common ways. Modern mass-produced clothing, for example, would be coded as moderately standardized.

Standardized (4) means that there is a universal form or pattern that all follow. Uniforms, for example, are standardized.

Coding should be done for the most common or most broadly used items. A society with moderately standardized clothing but some uniforms should be coded as moderately standardized. In other words, the typical items should be coded.

AR-TL-16. To what extent are agricultural/food acquisition tools standardized?

Code:

0 = no food acquisition tools

1 = Unstandardized

2 = Moderately unstandardized

3 = Moderately standardized

4 = Standardized

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Unstandardized (1) means that there are no generally employed forms or patterns.

Moderately unstandardized (2) means that there are generally employed forms or patterns, but that individuals make them so there is individual variation, or that there is a wide diversity within those general forms.

Moderately standardized (3) means that there are generally employed forms or patterns that manufactured in common ways. Modern mass-produced clothing, for example, would be coded as moderately standardized.

Standardized (4) means that there is a universal form or pattern that all follow. Uniforms, for example, are standardized.

Coding should be done for the most common or most broadly used items. A society with moderately standardized clothing but some uniforms should be coded as moderately standardized. In other words, the typical items should be coded.

AR-TL-19. To what extent are living dwellings (342) standardized versus architecturally diverse?

Code:

0 = no living dwellings

1 = Unstandardized

2 = Moderately unstandardized

3 = Moderately standardized

4 = Standardized

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Unstandardized (1) means that there are no generally employed forms or patterns.

Moderately unstandardized (2) means that there are generally employed forms or patterns, but that individuals make them so there is individual variation, or that there is a wide diversity within those general forms.

Moderately standardized (3) means that there are generally employed forms or patterns that manufactured in common ways. Modern mass-produced clothing, for example, would be coded as moderately standardized.

Standardized (4) means that there is a universal form or pattern that all follow. Uniforms, for example, are standardized.

Coding should be done for the most common or most broadly used items. A society with moderately standardized clothing but some uniforms should be coded as moderately standardized. In other words, the typical items should be coded.

AR-TL-20. To what extent are public structures (including bureaucratic or palace structures, defensive structures, marketplaces, etc.) standardized versus architecturally diverse?

Code:

0 = no public structures

1 = Unstandardized

2 = Moderately unstandardized

3 = Moderately standardized

4 = Standardized

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Unstandardized (1) means that there are no generally employed forms or patterns.

Moderately unstandardized (2) means that there are generally employed forms or patterns, but that individuals make them so there is individual variation, or that there is a wide diversity within those general forms.

Moderately standardized (3) means that there are generally employed forms or patterns that manufactured in common ways. Modern mass-produced clothing, for example, would be coded as moderately standardized.

Standardized (4) means that there is a universal form or pattern that all follow. Uniforms, for example, are standardized.

Coding should be done for the most common or most broadly used items. A society with moderately standardized clothing but some uniforms should be coded as moderately standardized. In other words, the typical items should be coded.

AR-TL-21. To what extent are ritual structures (including mounds, temples, enclosures, etc.) standardized versus architecturally diverse?

Code:

0 = no ritual structures

1 = Unstandardized

2 = Moderately unstandardized

3 = Moderately standardized

4 = Standardized

88 = conflicting information

99 = missing

Data Quality:

1 = good

2 = poor

3 = inferred answer

99 = missing data

Resolved coding:

0 = No

1 = Y

Unstandardized (1) means that there are no generally employed forms or patterns.

Moderately unstandardized (2) means that there are generally employed forms or patterns, but that individuals make them so there is individual variation, or that there is a wide diversity within those general forms.

Moderately standardized (3) means that there are generally employed forms or patterns that manufactured in common ways. Modern mass-produced clothing, for example, would be coded as moderately standardized.

Standardized (4) means that there is a universal form or pattern that all follow. Uniforms, for example, are standardized.

Coding should be done for the most common or most broadly used items. A society with moderately standardized clothing but some uniforms should be coded as moderately standardized. In other words, the typical items should be coded.

Social Transformation Variables

AR-ST-0. EVENT.

Code:

1 = Drought

2 = Flood

3 = Insect or Pest Infestation

4 = Frost

AR-ST-1. CHANGE IN POPULATION.

Code:

1 = Dramatic decrease

2 = Decrease

3 = Stable

4 = Increase

5 = Dramatic increase

88 = Conflicting information

99 = Missing

Data Quality:

1 = Good

2 = Poor

3 = Inferred answer

99 = Missing

AR-ST-2. CHANGE IN HEALTH OR NUTRITION.

Code:

1 = Dramatic decrease

2 = Decrease

3 = Stable

4 = Increase

5 = Dramatic increase

88 = Conflicting information

99 = Missing

Data Quality:

1 = Good

2 = Poor

3 = Inferred answer

99 = Missing

AR-ST-3. CHANGE IN CONFLICT.

Code:

1 = Dramatic decrease

2 = Decrease

3 = Stable

4 = Increase

5 = Dramatic increase

88 = Conflicting information

99 = Missing

Data Quality:

1 = Good

2 = Poor

3 = Inferred answer

99 = Missing

This variable is coded for both inter- or intra- community conflict, as the two are not easily separated in the archaeological record.

AR-ST-5. CHANGE IN HOUSEHOLD SCALE AND COMPLEXITY

Code:

1 = Household organization collapses.

2 = Size and/or organizational complexity of household decreases.

3 = Size and/or organizational complexity of household remains stable.

4 = Size and/or organizational complexity of household increases.

5 = Radical increase in the size and/or organizational complexity of households

88 = Conflicting information

99 = Missing

Data Quality:

1 = Good

2 = Poor

3 = Inferred answer

99 = Missing

AR-ST-6. CHANGE IN COMMUNITY SCALE AND COMPLEXITY

Code:

1 = Community organization collapses.

2 = Size and/or organizational complexity of community decreases.

3 = Size and/or organizational complexity of community remains stable.

4 = Size and/or organizational complexity of community increases.

5 = Radical increase in the size and/or organizational complexity of communities

88 = Conflicting information

99 = Missing

Data Quality:

1 = Good

2 = Poor

3 = Inferred answer

99 = Missing

AR-ST-7. CHANGE IN REGIONAL SCALE AND COMPLEXITY

Code:

1= Regional system collapses.

2 = Size and/or organizational complexity of region system decreases.

3 = Size and/or organizational complexity of regional system remains stable.

4 = Size and/or organizational complexity of regional system increases.

5 = Radical increase in the size and/or organizational complexity of regional system.

88 = Conflicting information

99 = Missing

Data Quality:

1 = Good

2 = Poor

3 = Inferred answer

99 = Missing

AR-ST-8. CHANGE IN COMMUNAL RITUAL

Code:

1 = Communal ritual ceases.

2 = Scale and/or organizational complexity of ritual decreases.

3 = Scale and/or organizational complexity of ritual remains stable.

4 = Scale and/or organizational complexity of ritual increases.

5 = Radical increase in the size and/or organizational complexity of ritual.

88 = Conflicting information

99 = Missing

Data Quality:

1 = Good

2 = Poor

3 = Inferred answer

99 = Missing

AR-ST-9 Old Change in Household Organization

1 = None

2 = Some

3 = Substantial

Data Quality:

1 = Good

2 = Poor

3 = Inferred answer

99 = Missing

AR-ST-10 Old Change in Village Organization

1 = None

2 = Some

3 = Substantial

Data Quality:

1 = Good

2 = Poor

3 = Inferred answer

99 = Missing

AR-ST-11 Old Change in Regional Organization

1 = None

2 = Some

3 = Substantial

Data Quality:

1 = Good

2 = Poor

3 = Inferred answer

99 = Missing

AR-ST-12 Old CHANGE IN COMMUNAL RITUAL

1 = None

2 = Some

3 = Substantial

Data Quality:

1 = Good

2 = Poor

3 = Inferred answer

99 = Missing

Index Variables

AR-IN-1 POLITICAL ECONOMY PETER INDEX

Average of the z-scores of the following variables:

 PE\_15, PE\_16, PE\_17, PE\_18, PE\_19

AR-IN-2 TIGHTNESS/LOOSENESS SHORT INDEX

Average of the z-scores of the following variables:

 TL\_1, TL\_3, TL\_5, TL\_8, TL\_13, TL\_15, TL\_20

AR-IN-3 SUBSISTENCE DIVERSITY SHORT INDEX

Average of the z-scores of the following variables:

 SV\_1, SV\_3, SV\_5, SV\_7, SV\_11, SV\_12

Archaeological Cases for Coded for Responses to Environmental Disasters

Great Lakes

 Focal region: Ontario peninsula

 Focal community: Draper 43.55.42N 79.10.32W

 Disaster: none expected

 Dates:

 GLE-1: 700CE;

 GLE-2: 900CE;

 GLE-3: 1250CE

 Periods:

 GLP-A: Point Peninsula Complex (300BCE-700CE);

 GLP-B: Princess Point Complex (700-1000CE);

 GLP-C: Early Ontario Iroquois (900CE-1250CE);

 GLP-D: Middle Ontario Iroquois (1250CE-1450CE)

 Traditions: Northeast Middle Woodland; Northeast Late Woodland; Proto-Iroquois.

 Descendant community: Iroquois (NM09)

Central Mississippi River Valley

 Focal region: American Bottom

 Focal community: Cahokia 38.39.18N 90.03.42W

 Disaster: flooding

 Dates:

 ABE-1: 280CE

 ABE-2: 580CE

 ABE-3: 1200CE

 Periods:

 ABP-A: Hopewell (150BCE-300CE);

 ABP-B: Rosewood (300-450CE);

 ABP-C: Mund (450-600CE);

 ABP-D: Patrick (600-750CE);

 ABP-E: Lohmann-Stirling (1050-1200CE);

 ABP-F: Moorehead (1200-1275CE)

 Traditions: Hopewell, Eastern Late Woodland, Mississippian

 Descendant community: Omaha (NQ21)

Southwestern US

 Focal region: Gila River Valley

 Focal community: Snaketown 33.11.19N 111.55.20W

 Disaster: drought

 Dates:

 SWE-1: 500CE

 SWE-2: 750CE

 SWE-3: 1100CE

 Periods:
 SWP-A: Pioneer/Formative (1-750CE)

 SWP-B: Colonial/Preclassic (750-1100CE)

 SWP-C: Classic (1100-1450CE)

 Traditions: Early Hohokam, Late Hohokam

 Descendant community: O’odham (NU79)

Mesoamerican Lowlands

 Focal region: Peten

 Focal community: Tikal 17.13.24N 89.37.17W

 Disaster: El Niño

 Dates:

 MYE-1: 550CE,

 MYE-2: 800CE,

 MYE-3: 1050CE

 Periods:

 MYP-A: Early Classic (250-600CE)

 MYP-B: Late Classic (600-900CE)

 MYP-B: Terminal Classic (900-1000CE)

 MYP-C: Early Postclassic (100-1250CE)\*

 Traditions: Classic Maya; Postclassic Maya

 Descendant community: Maya (NV10)

\*While coded, this case is not used in the Natural Disaster analyses, and is not included in the dataset used for those analyses [AR-DA-ND-V5-PP.sav]. The case was removed because it reflects the introduction of a new cultural group or groups, rather than a transformation of an existing one..

North Coastal Peru

 Focal region: Moche River Valley

 Focal community: Chan-Chan 08.06.21S 79.04.28W

 Disaster: El Niño

 Dates:

 MOE-1: 300CE,

 MOE-2: 550CE,

 MOE-3: 1000CE

 Periods:

 MOP-A: Early Moche (100-300CE)

 MOP-B: Middle Moche (300-550CE)

 MOP-C: Late Moche (550-750CE)

 MOP-D: Chimu (950-1520CE)\*

 Traditions: Moche, Chimu

 Descendant community: Inka (SE13)

\*While coded, this case is not used in the Natural Disaster analyses, and is not included in the dataset used for those analyses [AR-DA-ND-V5-PP.sav]. The case was removed because it reflects the introduction of a new cultural group or groups, rather than a transformation of an existing one..

Egypt

 Focal region: Upper Nile Valley

 Focal community: Memphis 29.15.40N 31.15.03E

 Disaster: drought

 Dates:

 EGE-1: 3200 BCE

 EGE-2: 2200 BCE

 Periods

 EGP-1: Lower Egypt Predynastic (5000-3100 BCE)

 EGP-2: Early Dynastic Egypt (3100–2200 BCE)

 EGP-3: First Intermediate Period (2200–2000 BCE)

 Traditions: Lower Egypt Predynastic, Early Dynastic Egypt, Protohistoric Egypt

 Descendant community: Fellahin (MR13)

Northern Mesopotamia

 Focal region: Khabur River

 Focal community: Tell Leilan 36.57.26N 41.30.19E

 Disaster: drought

 Dates:

 NME-1: 3200 BCE

 NME-2: 2200 BCE

 Periods:

 NMP-1: Uruk (4000-3200 BCE)

 NMP-2: Sumerian (3200-2300 BCE)

 NMP-3: Akkadian (2300-2200 BCE)

 Traditions: Late Chalcolithic Mesopotamia, Early Dynastic Mesopotamia, Akkadian

 Descendant community: Kurds (MA11)

Yellow River Valley

 Focal region: Central Yellow River Valley

 Focal community: Xian 43.15.57N 108.56.33E

 Disaster: flooding

 Date:

 YRE-1: 2000 BCE

 Periods:

 YRP-1: Longshan (Kexingzhuang) (2500-1900 BCE)

 YRP-2: Erlitou (1900-1500 BCE)

 Traditions: Longshan

 Descendant community: Manchu (AG04)

Northern Europe

 Focal region: Denmark

 Focal community:

 Disaster: none expected

 Dates:

 NEE-1: 2000 BCE

 NEE-2: 500 BCE

 Periods

 NEP-1: Ertebolle (3300-2000 BCE)

 NEP-2: Funnel Beaker (2000-500 BCE)

 NEP-3: Pre-Roman Iron Age (500 BCE-500 CE)

 Traditions: Scandinavian Bronze Age, Scandinavian Iron Age

 Descendant community: [none]

South Asia

 Focal region: Indus River Valley

 Focal community: Mohenjo Daro 27.19.30N 68.08.00E

 Disaster: drought

 Dates:

 IRE-1: 2200 BCE

 Periods

 IRP-1: Middle Harappa (3B) (2450-2200 BCE)

 IRP-2: Final Harappa (3C) (2200-2000 BCE)

 Traditions: Mature Indus

 Descendant community: Baluchi (AT02)