

# Codebook to Accompany Ember et al. Warfare, Atrocities, and Political Participation: Eastern Africa (JACPR, in review)--NOVEMBER 7

## Part I: The eastern African comparison

### General Notes:

For most purposes the ratings are made with regard to the whole society (such as ratings of warfare frequency). However, if there is internal variation, such as how warriors treat noncombatants the situation of the focal group should be given priority.

For the analyses in this paper, only the societies that met the following criteria were included in the analyses reported:

- not pacified (**R\_Pacification** <3) during the 25 year time period (see **Time**)
- had more reliable scores (**ReliabIntFreq**<4) by the two coders on internal warfare
- made more than minimal decisions at the community level (**Resolved\_Local\_Var10**<4)

The variables in the SPSS data file and the Excel spreadsheet (accompanying) are described below. In parentheses are the labels in the columns of the database and/or spreadsheet.

The data file is **Ember\_et\_al\_EAfrica\_PolPart\_Codes\_JACPR**. The file is located at <http://hrafarc.org>.

### Culture ID (ID\_Culture)

### Culture Name (Culture\_Name)

### OWC

HRAF ID from the Outline of World Cultures (**OWC**)

### Ethnographic Atlas ID (EA\_ID)

The alphanumeric ID from the Ethnographic Atlas

### Time

The date given here (the ethnographic present--EP) formed the basis for the time period rated in the study. A 25-year time period was from -15 prior to the EP to +10 years afterwards. Most of the cases were rated for the time frame in the Ethnographic Atlas. The following notes indicate the exceptions:

- 1) The following societies were coded for a period earlier than date in *Ethnographic Atlas* (EA dates --Gikuyu, 1920; Mbundu, 1905; Ngoni, 1940; Nyoro, 1950; and Teda, 1950).
- 2) The following societies were coded for a period later than date in *Ethnographic Atlas* (EA dates-- Burundi. 1910; Darfur, 1956; and Rwanda, 1962).
- 3) Burundian political participation was coded earlier than warfare--1910.

### **Pacification (R\_Pacification)**

In the HRAF Collection of Ethnography information on pacification was generally contained in OCM categories 177 and 636. For this research, only societies whose resolved pacification scores of 1 or 2 were used: 1) Not pacified for all or part of the 25-year time period as reported by ethnographer; 2) Inferred to be unpacified because warfare frequency is greater than or equal to 3 by individual coder; 3) not completely pacified; some indication that warfare has decreased because of pacification attempts; 4) pacified before the 25-year ethnographic present.

### **Frequency of Internal Warfare:**

For ratings of warfare frequency in societies represented in the HRAF Collection of Ethnography, the coders were asked to read the full-text information in categories 578, 628, 648, 721, 723, and 726 of the Outline of Cultural Materials (OCM), the HRAF subject-indexing system.

Following the C. R. Ember and M. Ember (1992a: 248) study, warfare is defined as: “socially organized armed combat between members of different territorial units (communities or aggregates of communities).” Note that the scale and organization of warfare generally differs considerably from warfare in modern nation-states, although the mortality rates are probably considerably higher proportionally. Any socially organized armed combat engaged in between communities or larger units was considered warfare regardless of the stated intent (e.g., revenge). By this definition, we focus on armed combat of socially organized groups, not on motives for fighting. Accordingly, some feuding will be considered warfare, if the episode is between communities or larger units and if there is at least one socially organized group on at least one side.

*Internal Warfare.* We follow C. R. Ember and M. Ember (1992b: 173), in distinguishing internal from external warfare as follows: “internal warfare is defined as socially organized armed combat between territorial units (communities or larger aggregates) within the same society”

### ***Internal Warfare Frequency Summary Scores (IntFreqSum)***

Note: each of two coders rated on the following 5-point scale for each of the five frequency measures of warfare and then if a code from 1-5 was given, the two scores were summed. Frequency ratings were based on the following five-point ordinal scale used by each of the two coders:

- 1) Internal warfare seems to be absent or rare (coders were instructed not to code warfare as absent simply because there is no information unless the ethnographer

- explicitly states that there is little or no warfare, or unless the ethnographer describes intercommunity and intra- and inter-societal contacts but does not mention hostilities.);
- 2) Internal warfare seems to occur once every three to ten years;
  - 3) Internal warfare seems to occur at least once every two years;
  - 4) Internal warfare seems to occur every year, but usually only during a particular season;
  - 5) Internal warfare seems to occur almost constantly and at any time of the year.

### **Reliability of Internal Warfare Frequency (ReliabIntFreq)**

- 1) Coders agree
- 2) Coders differ by 0.5
- 3) Coders differ by 1.0 point
- 4) Coders differ by more than 1.0 point
- 5) One coder said don't know

Scores of 4 or 5 were omitted from the analyses reported here

### **Behavior Toward Noncombatants and Combatants During Internal Warfare**

Note: The point of reference here is what the society you are rating does when engaged in *internal (within society)* armed combat.

[In the data file, a prefix of R\_Int stands for resolved rating; INT stands for during internal warfare

#### ***Killing or Attempting to Kill Non-Combatants (R\_IntBNC-1):***

- 1) Non-combatants are never or rarely attacked with the intent to kill
- 2) Non-combatants are sometimes attacked with the intent to kill
- 3) Non-combatants are usually attacked with the intent to kill
- 4) Non-combatants are always attacked with the intent to kill
- 7) not applicable because warfare does not occur during time period
- 8) don't know
- 9) confusing or contradictory

#### ***Rape of Women Associated with Armed Combat (R\_IntBNC-2)***

- 1) Women are rarely or never raped
- 2) Women are sometimes raped
- 3) Women are usually raped
- 4) Women are always raped
- 7) not applicable because warfare does not occur during time period
- 8) don't know
- 9) confusing or contradictory

#### ***Torture or Mutilation of Non-Combatants and/or Combatants (R\_IntBNCC-3):***

Try to separate killing itself (rated in BNC-1) from deliberate attempts to promote or prolong physical and/or psychological pain and suffering [Note: original coding scheme tried to separate treatment of non-combatants and combatants, but scale was combined because coders could not usually tell.]

- 1) Torture or mutilation is rarely or never practiced
- 2) Torture or mutilation is sometimes practiced
- 3) Torture or mutilation is usually practiced
- 4) Torture or mutilation is always practiced
- 7) not applicable because warfare does not occur during time period
- 8) don't know
- 9) confusing or contradictory

***Destruction of Civilian Resources (e.g., crops destroyed, houses burnt)—(R\_IntBNC-4).***

- 1) Civilian resources are rarely or never destroyed
- 2) Civilian resources sometimes destroyed
- 3) Civilian resources usually destroyed
- 4) Civilian resources always destroyed
- 7) not applicable because warfare does not occur during time period
- 8) don't know
- 9) confusing or contradictory

***Non-Physical Intimidation of Civilians (R\_BNC-5).***

- 1) Intimidation of civilians is rare.
- 2) Intimidation of civilians occurs sometimes.
- 3) Intimidation of civilians is usual.
- 4) Intimidation of civilians always occurs.
- 7) not applicable because warfare does not occur during time period
- 8) don't know
- 9) confusing or contradictory

**Population Affected by Atrocities (R\_IntBNC-1\_Pop, R\_IntBNC-2\_Pop, R\_IntBNCC-3\_Pop, R\_IntBNC-4\_Pop, R\_IntBNC-5\_Pop)**

For each of the atrocities rated above for internal warfare (R\_IntBNC-1, R\_IntBNC-2, R\_IntBNCC-3, R\_IntBNC-4, R\_IntBNC-5) the coders separately rated the population that was typically affected by each type of atrocity on the following scale:

- 1) small scale (one or a few individuals affected)
- 2) moderate scale (more than a few affected; but not a major portion of the attacked group)
- 3) large scale (affects a major portion of the attacked group)
- 4) 4-massive scale (affects almost the entire attacked group—e.g., whole village).

**Weighted Atrocities Score (BNC1to5xPopSumDivByViable)**

A weighted atrocity score was calculated for each of the 5 atrocity scores (R\_IntBNC-1, R\_IntBNC-2, R\_IntBNCC-3, R\_IntBNC-4, R\_IntBNC-5) by multiplying the frequency score by the population affected score. So if R\_IntBNC-1 was a score of 4 and the population affected (R\_intBNC-1\_Pop) was a 4 the weighted score would be a 16. We averaged the weighted scores across the five types of atrocities if at least 2 of the 5 types of atrocities were rated for a society--a majority of cases had data for 4 or more types.

### **Political Participation at the Local Level**

All ratings of political participation were made for the *community-level*, not any multilocal level following the coding scales from Ross (1983: 176-177). If the case was in the HRAF database (paper or eHRAF World Cultures), the coders read the text materials in the HRAF subject categories 621 (Community Structure), 622 (Headmen), 623 (Councils), 624 (Local Officials), 625 (Police), and 626 (Social Control), and to code each of the local political participation variables described below.

#### ***Checks on Leaders' Power (Resolved\_Local\_Var6)***

- 1) There are few checks on political power in the society or those that exist do not seem to be invoked very often.
- 2) There are checks on leaders' power that seem to make them sensitive to popular pressures.
- 3) Political leaders in the society are careful to act only after securing substantial support for particular actions.
- 4) There are no leaders who act independently, lest they lose their backing in the community.
- 9) Not codable.

#### ***Removal of Leaders (Resolved\_Local\_Var7)***

- 1) There appears to be virtually no way in which incompetent or disliked leaders can be removed, except for rebellion or popular uprisings.
- 2) There are institutionalized means for removing leaders that are invoked from time to time, possibly by other elites in the community.
- 3) Leaders are not necessarily removed from office in a formal manner but they may be ignored and come to lose their influence in the community.
- 4) Leadership is not formalized so individuals lose power when support disappears or diminishes.
- 9) Not codable.

#### ***Leaders' Need for Consultation (Resolved\_Local\_Var8)***

- 1) Leaders frequently act independently and make authoritative decisions that are then presented to the community
- 2) Leaders seem to make relatively few decisions on their own

- without consultation with members of the community
- 3) Leaders or influential individuals use persuasion (personal skills as opposed to exercise of authority) to help organize and structure group action.
  9. Not codable.

### ***Range of Decision Making (Resolved\_Local\_Var10)***

- 1) The community makes collective decisions (formally or informally) that impinge on many aspects of people's lives.
- 2) The community makes collective decisions that impinge on a moderate number of areas of people's lives.
- 3) The community makes collective decisions that impinge on relatively few aspects of people's lives.
- 4) There seem to be minimal collective decisions made that impinge on people's lives.
- 9) Not codable.

The reader should note that societies that had a scale score of 4 were omitted, because they were considered to have minimal collective decision making.

### ***Extent of Involvement (Resolved\_Local\_Var11)***

In the analyses, the scores for Variable 11 were reversed from those that are shown here. In other words, 4 was 1 and 1 was 4 (**Reversed\_Local\_Var11**). Here, to facilitate combining scores with others that were previously published by Ross (1983, p. 177), the meanings of the scores are as Ross originally published them.

Within those areas where community decision making occurs, adult involvement in decision making is best characterized as follows:

- 4) Low or nonexistent: Leaders make most decisions and involvement of the average person is highly limited or absent.
- 3) Moderate: Some consultation is present and there is some input from the community, but on the average it is not high.
- 2) High for some: There is substantial political involvement for certain persons or groups, but others are excluded on the basis of gender, age, or kinship status.
- 1) Widespread: Decision-making forums (formal or informal) are open to all adults and involvement seems relatively great. (Societies with widespread participation for men but not for women are scored 2.)
- 9) Not codable.

### ***Local Political Fission (Resolved\_Local\_Var30)***

- 1) Dissatisfied persons often move to another community following disputes.

- 2) Dissatisfied persons sometimes move to another community following disputes.
- 3) Dissatisfied persons rarely or never move to another community following disputes.
- 9) Not codable.

As we coded Variable 30, we interpreted moving to include imprisonment or internal banishment for "political" crimes (such as treason) as well as external banishment for such crimes; but we did not consider imprisonment or banishment for "civil" crimes (such as incest or theft) to be moving after a dispute.

### ***Little Formalized Community Leadership (LittleFormalizedLeadership)***

Societies with scale scores 3.75-4 on variables 6 and 7 (**Resolved\_Local\_Var6 and Resolved\_Local\_Var7**) were considered to have "little formal community leadership" and were scored a 1. Those with scores 1-3.5 on one or both variables were scored a 0 to indicate more formalized community leadership.

### **Multilocal Political Organization**

We developed simplified codes (Mult5M, Mult6M, and Mult7M--not included here) that were adapted from Tuden and Marshall's (1980, pp. 120-121) columns 5 to 7. As explained below, an overall score for multilocal political participation (rvmult) was used in our analyses. We use the symbols 5M, 6M, and 7M to convey that the codes are modified versions of Tuden and Marshall's columns 5, 6, and 7. With the exception of an additional code Mult10M, these coding categories were the same as used by Ember, Ember and Russett (1992--see also Ember, Russett, and Ember 1993).

### ***Executive and Legislative Authority (Mult5M)***

- 1) Supreme decision-making authority is concentrated in a single or plural executive (e.g., committee, dual, triumvirate; influence of advisors is irrelevant). Formerly Tuden and Marshall codes P or L.
- 2) Supreme decision-making authority is vested in a council, assembly, or other deliberative body, or is shared more or less equally by such a body and a single or plural executive (king, president, or prime minister). Formerly Tuden and Marshall codes C or S.
- 8) There is no effective sovereignty above the local community.
- 9) Uncodable.

### ***Selection of Executive (Mult6M)***

- 1) Executive is chosen by heredity, by divination, by a body of limited size (ruling clique, party, or small body of electors, and any wider elections are merely a stereotyped confirmation of

the decision of a limited power group), or by an alien society.

Formerly Tuden and Marshall codes p, q, m, n, f, 1, a, and s.

2) Executive is selected or otherwise chosen (perhaps by consensus) by a council or other deliberative body, or there is no executive other than a presiding officer of the council. Formerly Tuden and Marshall code c.

3) Succession is nonhereditary by a formal electoral procedure, which is participated in by a substantial portion of the free citizenry. Formerly Tuden and Marshall code e.

7) There is no executive, even though multilocal level exists.

8) There is no effective sovereignty above the local community.

9) Not codable

### ***Deliberative and Consultative Bodies (Mult7M)***

1) There is no deliberative body, or only an aristocratic body whose membership is hereditary or confined to ascribed statuses, for example, a council of nobles, or one whose members are appointed by the chief executive or a ruling clique or party. Formerly Tuden and Marshall codes O, C, A.

2) There is a deliberative body representative of most or all of the major social, class, or ethnic components; Formerly, Tuden and Marshall code R.

3) An elective legislature or parliament is chosen independently by the franchise of a substantial proportion of the free citizenry. Formerly Tuden and Marshall code E.

8) There is no effective sovereignty above the local community.

9) Not codable.

Note: If there are two deliberative bodies, we coded the one that gave a Code 2 for Executive if applicable, or, if that was not applicable, that gave a Code 2 for Selection of Executive. If still not identified, we coded the one chosen by the broader franchise.

### ***Range of Decision Making at the Multilocal Level (Resolved\_Mult10M)***

1) The leadership makes collective decisions (formally or informally) that impinge on many aspects of people's lives.

2) The leadership makes collective decisions that impinge on a moderate number of areas of people's lives.

3) The leadership makes collective decisions that impinge on a relatively few aspects of people's lives.

4) There seem to be minimal collective decisions made that impinge on people's lives.

5. Not codable

### ***Overall Score for Multilocal Participation (rvmult)***

The 5M, 6M, and 7M codes were combined to form the following

scale. (A scale score of 5 denotes the highest level coded for such participation.)

- 0) No effective sovereignty above the local community.
- 1) 5M = 1, 6M = 2 and 7M = 1 or 2, or 6M = 1 and 7M = anything
- 2) 5M = 1, 6M = 2, 7M = 3.
- 3) 5M = 1, 6M = 3, 7M = anything
- 4) 5M = 2, 6M = 2 or 7 and 7M = 2, or 6M = 1 and 7M = anything (note that 5M = 2, 7M = 1 is a null set).
- 5) col. 5 = 2, col. 6 = 2, 3, or 7, col. 7M = 3.

### **State Organization (StateShort)**

To measure the presence of states, we used ratings from Murdock and Provost (1980; variable 9) or the EA (Murdock 1962-1971; column 32b). Societies with 3 or 4 levels of political hierarchy above the community level were considered to have state organization (see Table 1).

- 1) present
- 0) absent

### **Population (PopulationLog10)**

Population size for each society is based on: 1) estimated total of all people from a group if it was linguistically/ethnically homogeneous, or 2) total number of people encompassed by the society if it was linguistically heterogeneous. Some population figures were taken from the EA (Murdock, 1962-1971), although we found most in primary ethnographic sources. Nineteen percent of the cases had population figures within 35 years of the time period rated for warfare; 95 percent were within 50 years. Population sizes were transformed to a log10 scale.

### **Natural Hazards Seriously Destroying Food Resources (R\_Disasters)**

USE OCMs: 132, 146, 261-2, 312, 433, 731, 735

We want to have a rating here of the incidence of severe weather problems (droughts, floods, storms, killing frosts, etc.) or pest problems (e.g., locust infestations) that may destroy food resources. If ethnographers say so, record exactly when (what years) these events occurred and note the seriousness of the effects on resources or people (e.g., what proportion of the crop was destroyed, how many people or what proportion of the population were affected).

- 1) low – food is reported to be ample or adequate with no indication that there have been severe natural disruptions of food supplies. Mark a “1” also if such serious disruptions only occurred in the past or future (not in this time period). If there were some disruptions of food supplies, but they did not seem to be serious because there was plenty of other food available or made available, consider the coding to be a “1”.
- 2) moderate – there is no reported serious natural disruption of food during this time period, but the ethnographer states that there is an ever-present threat of such disruptions.

- 3) moderately high – one serious natural disruption of food occurred during the 25-year time period.
- 4) high – more than one serious natural disruption occurred during the 25-year time period.
- 8) don't know (a "." In the file)
- 9) confusing or contradictory (a "." In the file)

For analysis, DisastersShort combined 3 societies with 2.5 with 2.0 and 2 societies with 3.5 with 3.0. The shortened scores are given in R\_Disasters.

## **Part II: The worldwide comparison**

### **General notes:**

Most of the data in the accompanying data file are from Carol Ember's data file pertaining to the data from Ember, Ember, and Russett (1992) and Ember, Russett, and Ember (1993)--the latter contains a printed version of the coded data. We only reproduce here those codes used in the analyses presented in this paper. In addition, we created two new variables to add to the model--Little Formalized Community Leadership and State Short.

The data file is **Ember\_et\_al\_Worldwide\_PolPart\_Codes\_JACPR2017** The file is located at <http://hrafarc.org>.

### **Culture ID (id)**

### **Culture Name (name\$)**

### **Time (date\$)**

This is the ethnographic present. Please note that a few cases in the SCCS sample that were pacified at the SCCS ethnographic present were recorded for other time periods and were given new ids of 187-197. Their names appear twice, but they were only used for their nonpacified time period.

### **Pacification (paccode)**

In the HRAF Collection of Ethnography information on pacification was generally contained in OCM categories 177 and 636. For this research, only societies whose resolved pacification scores of 1 or 2 were used: 1) Not pacified for all or part of the 25-year time period as reported by ethnographer; 2) Inferred to be unpacified because warfare frequency is greater than or equal to 3 by individual coder. The remaining scores are: 3) not completely pacified; some indication that warfare has decreased because of pacification attempts; 4) pacified before the 25-year ethnographic present; 6) the culture is part of a state society (e.g., Uttar Pradesh);

because the culture is not independent, pacification cannot be judged. (This code was applied only to the cases in the original SCCS sample; 9) not clear enough to judge.

### **Frequency of Internal Warfare (intfreq):**

Resolved ratings.

### **Reliability of Internal Warfare Frequency Ratings (reliable\_intfreq\$)**

As explained in Ember, Russett and Ember (1993: 109), there were two different reliability ratings for the SCCS sample and for the additional societies added. A combined reliability code was created to cover both sets. A score of "3" on this variable indicates the more reliable cases.

### **Political Participation at the Local Level**

The variable definitions are the same as in the eastern African comparison, but the variable labels are revvar6, revvar7, revvar8, revvar10, revvar11, and revvar11R (reversed var 11), and revvar30)

### ***Little Formalized Community Leadership* (LittleFormalCommLeadership)**

This variable was added post-hoc to the data file. Societies with scale scores 3.75-4 on variables 6 and 7 (**Resolved\_Local\_Var6** and **Resolved\_Local\_Var7**) were considered to have "little formalized community leadership" and were scored a 1. Those with scores 1-3.5 on one or both variables were scored a 0 to indicate more formal community leadership.

### **Multilocal Political Organization (rvmult)**

See explanations above in Part I for the derivation of the **rvmult** score.

### **State Organization (stateshort)**

Most of the societies in this sample are included in the Ethnographic Atlas and the level of political hierarchy is listed in column 32b. This information is also in the SCCS. We consider a society to be a state if the level of hierarchy is 3 or more levels above the community.

1= present

0=absent

### **Isolated Island (isl)**

The Ember, Ember, Russett (1992) paper added “isolated island” to the model predicting more internal warfare. An isolated island is defined as an island (or group of islands) with no other society within 50 miles. A dummy score was created (0=no; 1=yes).

## Population

The population (**pop**) and the log of the population (**poplog10**)

## References

Ember, C. R., Adem, T. A. and Skoggard, I. (2013) 'Risk, uncertainty, and violence in eastern Africa', *Human Nature*, 24, pp. 33-58.

Ember, C. R. and Ember, M. (1992a), “Resource unpredictability, mistrust, and war: a cross-cultural study”, *Journal of Conflict Resolution*, Vol. 36, pp.242-62.

Ember, C. R. and Ember, M. (1992b), “Warfare, aggression, and resource problems: cross-cultural codes”, *Cross-Cultural Research*, Vol. 26, pp. 169-226.

Ember, C. R., Ember, M. and Russett, B. (1992), “Peace between participatory polities: a cross-cultural test of the ‘democracies rarely fight each other’ hypothesis”, *World Politics*, Vol. 44 No. 4, pp. 573-599.

Ember, C. R., Russett, B. and Ember, M. (1993), “Political participation and peace: cross-cultural codes”, *Cross-Cultural Research*, Vol. 27 Nos. 1-2, pp. 97-145.

Murdock, G. P. (1962-1971), “Ethnographic atlas”, *Ethnology*, Vols. 1-10.

Murdock, G. P. and Provost C. (1980), “Measurement of cultural complexity”, Barry, H. III and Schlegel A., *Cross-Cultural Samples and Codes*, University of Pittsburgh Press, Pittsburgh, PA, pp. 147–160.

Ross, M. H. (1981), “Socioeconomic complexity, socialization, and political differentiation: a cross-cultural study”, *Ethos*, Vol. 9 No. 3, pp. 217-247.

Ross, M. H. (1983), “Political decision-making and conflict: additional cross-cultural codes and scales”, *Ethnology*, Vol. 22 No. 2, pp. 169-192.

Tuden, A. and Marshall, C. (1980), “Cross-cultural samples and codes 4”, Barry, H., III and Schlegel, A., *Cross-Cultural Samples and Codes*. University of Pittsburgh Press, Pittsburgh, PA, pp. 117-145.