

## Syllabus for ANG6481 Research Methods in Cognitive Anthropology – Cultural Domain Analysis

Course instructor: Rosalyn Negrón

Lectures by: Rosalyn Negrón, Clarence Gravlee, & H. Russell Bernard

Online Office Hours – TBA

Email: [rosalyn.negron@umb.edu](mailto:rosalyn.negron@umb.edu)

**Course description:** Cultural domain analysis (CDA) is the study of how people in a group think about lists of things that somehow go together. These can be physical, observable things—kinds of wine, kinds of music, rock singers, foods that are appropriate for dessert, medicinal plants, ice cream flavors, animals you can keep at home, horror movies, symptoms of illness—or conceptual things like occupations, roles, emotions, racial categories, things to do on vacation, things you can do to help the environment, and so on. The method comes from work in cognitive anthropology but it has since been picked up in fields such as marketing, product development, and public health. CDA involves systematic interviewing to get lists of items that comprise a coherent cognitive domain.

The data collection methods covered in this course include: free lists, pile sorts, and ratings. The data analysis methods include: multidimensional scaling, hierarchical clustering, property fitting (PROFIT), quadratic assignment procedure (QAP), and consensus analysis. Students will have hands-on practice with data collection techniques and with data analysis using Visual Anthropac, Ucinet, and Flame software.

**Course objectives:** Students taking this course will (1) develop a working familiarity with methods to collect and analyze cultural domain data, (2) understand the theory behind profile matrices and similarity matrices and how they can be used in different areas of research, (3) have hands-on practice using software to analyze cultural domain data, and (4) apply these knowledge and skills to their own independent projects.

**Readings:** Readings for the course will be posted on the course website.

### Software:

Visual Anthropac, free, available at <http://www.analytictech.com/anthropac/anthropac.htm>

UCINET, free 30-day trial available at <http://www.analytictech.com/downloaduc6.htm>

Flame, will be provided by the instructor

**Grading policies:** Each week, students will read, attend class, and participate in weekly discussions (25% of final grade). Students will also do methodological exercises and submit their results (50% of final grade). These exercises will help students develop hands-on experience and a practical understanding of how methods work. For their final assignments students will submit a lab book (25% of final grade). Assignments should be turned in on or before the due date, unless excused with university-approved documentation.

### Grading Summary:

25% Preparation for and participation in discussions

50% Homework assignments

25% Lab book

### Preparation for and participation in discussions:

For each lesson, plus introduction and final, students will be required to make two discussion posts: (1) a 100 to 250-word response to a discussion question related to the readings and lectures and (2) a 50-word response to another student's post. There will be 13 discussion posts; each will be worth 100 points (initial post=75 points; follow-up post=25 points).

**Homework assignments:**

For each lesson, plus the introduction, students will be asked to do a hands-on exercise that will help develop their practical skills in CDA. Examples of these exercises include free list and pile sort data collection, and running multidimensional scaling. For some exercises, the instructor will provide practice datasets, but for others, students will collect data themselves. Early in the course the instructor will assist students in selecting a cultural domain that will be studied by the whole class. There will be 11 exercise assignments; each will be worth 100 points.

**Final project – Lab Book**

For their final assignment, students must submit an electronic lab book (in .doc or .pdf format) detailing how to analyze cultural domain data in Visual Anthropac, Ucinet, and Flame. To develop their lab books, students are encouraged to keep careful notes of the steps involved in the various procedures throughout the class, with accompanying definition of terms, visuals, and data management details. The lab book is meant to be a personalized resource for students to refer back to in their future work. The various exercises in the course will provide plenty of practice to document in the lab books. Lab books should include a table of contents, screenshots, and clear, organized explanations of procedures.

**Academic Honesty:** Unless it is specifically connected to assigned collaborative work, all work should be individual. Evidence of collusion (working with someone not connected to the class or assignment), plagiarism (use of someone else's published or unpublished words or design without acknowledgment) or multiple submissions (submitting the same paper in different courses) will lead to the Department's and the University's procedures for dealing with academic dishonesty. All students are expected to honor their commitment to the university's Honor Code (available online at <http://www.registrar.ufl.edu/catalog/policies/students.html>).

**Disability Accommodations:** If you are a disabled student in need of special arrangements for exams or homework, we will do all we can to help. Students requesting classroom accommodation must first register with the Disability Resource Center (<http://www.dso.ufl.edu/drc/>). The DRC will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

**Course Schedule****Module 1: Introduction**

Discussion Question: After reading the assigned readings, write a 200-word statement describing how you might apply CDA to your research interests.

Readings:

- Boster (1987) "Introduction"
- D'Andrade (1995) "Background"

**Module 2: Getting Started**

Discussion Question: What additional knowledge and/or skills might you need to prepare you to do cultural domain research?

Readings:

- Plattner (2004) “Human Subjects Protection and Anthropology”
- Johnson & Weller (2002) “Elicitation Techniques for Interviewing”
- Chibnik (1985) “The Use of Statistics in Sociocultural Anthropology”

Exercise: Install Visual Anthropac, Ucinet, and Flame

### **Module 3: Cultural Domain Data**

Discussion: Consider the issues raised by Bernard, et al. about the state of data collection 30 years ago when they wrote the article on the “Construction of Primary Data...”; would you revise the main ideas of their article in light of contemporary data collection practices? If so, explain. What has changed? What has stayed the same?

Readings:

- Bernard, et al. (1986) “The Construction of Primary Data in Cultural Anthropology”
- Borgatti (1997) “Proximities”
- Borgatti (1994) “Cultural Domain Analysis”

Exercise: Identify a cultural domain for a research topic of interest and explain how it is connected to your research interests.

### **Module 4: Free Lists Part 1**

Discussion: Share your experiences collecting free lists. What were some challenges? What were some surprises? What did you learn about the domain and about how think people about the domain?

Readings:

- Brewer (2002) “Supplementary interviewing techniques to maximize output in free listing tasks”
- Gravlee, et al. (2013) “Mode effects in free-list elicitation: comparing oral, written, and web-based data collection”
- Quinlan (2005) “Considerations for collecting freelists in the field: examples from ethnobotany”

Exercise: Collect 5 free lists for the cultural domain selected in Module 3.

### **Module 5: Free Lists Part 2**

Discussion: Contribute to class discussion about what items to select for pile sorting. Where would you cut the list off? Are there one-off’s and other more uncommon items that you would include in the pile sort exercise? Why?

Readings:

- Quinlan & Quinlan (2006) “Balancing the system: humoral medicine and food in the commonwealth of Dominica”
- Smith, et al. (2007) “What defines the good person? Cross-cultural comparisons of experts’ models with lay prototypes”
- Thompson & Juan (2006) “Comparative cultural salience: measures using free-list data”

Exercise: Compile & clean free lists and select subset for pile sorting.

## Module 6: Pile Sorts Part 1

Discussion: Share your experiences administering the pile sorts. What were some challenges? What were some surprises? What did you learn about the domain and about how people categorize items?

### Readings:

- Borgatti (1999) “Elicitation techniques for cultural domain analysis”
- Boster & Johnson (1989) “Form & Function”
- Trotter & Potter (1993) “Pile Sorts, A Cognitive Anthropological Model of Drug and AIDS Risks for Navajo Teenagers”

Exercise: Collect 5 pile sorts.

## Module 7: Pile Sorts Part 2

Discussion: Carefully review the proximity matrix of the pile sort data. Which items tended to appear in the same piles? What are some items that were seldom put on the same piles? What patterns do you see in the data? What conclusions or hypotheses might you draw?

### Readings:

- Ensign & Gittlesohn (1998) “Health and access to care”
- Necheles, et al. (2007) “The teen photovoice project”
- Macaуда, et al. (2011) “A cultural model of infidelity among African American and Puerto Rican young adults”

Exercise: Compile, clean pile sort data, import and create proximity matrix.

## Module 8: MDS & Cluster Analysis

Discussion: Select one of the MDS graphs shared by instructor, provide your interpretation for the clusters and dimensions that appear in the graph.

### Readings:

- Borgatti (1997) “MDS”, Retrieved from <http://www.analytictech.com/borgatti/mds.htm>
- Lieberman & Dressler (1977) “Bilingualism and Cognition of St. Lucia Disease terms”
- Guest & McLellan (2003) “Distinguishing the trees from the forest”

Exercise: Run MDS and cluster analysis & write 1-2 double-spaced pages summarizing / interpreting findings.

## Module 9: Quadratic Assignment Procedure (QAP)

Discussion: For the class’ cultural domain, contribute to class discussion about what groups you would use QAP to compare and why? What differences would you hypothesize?

### Readings:

- Borgatti (2002) “A statistical method for comparing aggregate data across a priori groups”
- Koster, J. (2011) “Interhousehold meat sharing among Mayangna and Miskito horticulturalists in Nicaragua”
- Weller (1984a) “Consistency and Consensus among Informants”

Exercise: Extract matrices from pile sort proximity matrix and run QAP on extracted matrices.

### **Module 10: Cultural Consensus Analysis**

Discussion: Contribute to the design of a cultural consensus questionnaire. Contribute ideas for content and design.

Readings:

- Hruschka, et al. (2008) “When there is more than one answer key”
- Romney, Weller, & Batchelder (1986) “Culture as consensus”
- Weller (2007) “Cultural Consensus Theory”

Exercise: Administer 5 cultural consensus questionnaires, run cultural consensus analysis on merged class data set.

### **Module 11: Cultural Consonance Analysis**

Discussion Question: Cultural consonance analysis is a novel application of cultural consensus theory that has made an important contribution to health disparities research. Can you think of other potential applications of cultural consensus analysis, within or beyond health research? How else might you use cultural competence scores?

Readings:

- Dressler, et al. (2005) “Measuring cultural consonance”
- Dressler & Bindon (2000) “The health consequences of cultural consonance”
- Reyes-García, et al. (2010) “Cultural consonance and psychological well-being”

Exercise: Identify two behaviors to assess cultural consonance in your research and explain how you would measure them.

### **Module 12: PROperty FITting (PROFIT)**

Discussion Question: Compare Figures 1 and 7 in Weller (1984b). What do the PROFIT lines represent in the graphs? What does the distribution of the PROFIT lines in each graph mean? What conclusions can you draw about the concept of contagion in the U.S. and the hot-cold concept in Guatemala?

Readings:

- Collins & Dressler (2008) “Cultural models of domestic violence”
- Gravlee (2005) “Ethnic classification in southeastern Puerto Rico”
- Weller (1984b) “Cross Cultural Concepts of Illness”

Exercise: Test multiple dimensions of the “green behaviors” domain using PROFIT in Ucinet.

### **Module 13: Putting it All Together**

Discussion Question: Now that we’ve reached the end of the course, revisit your response to Module 1. Would you revise your original response about how you would use CDA in your own research? If yes, how? If not, explain.

Readings:

Bernard, et al. (2010) "Green Cognition & Behavior"

Chavez, et al. (1995) "Structure and meaning in models of breast and cervical cancer risk factors"

**Final assignment:** Lab book.

### Required Reading

Bernard, H. R., G. Ryan, and S. Borgatti (2010). Green Cognition and Behavior: A Cultural Domain Analysis. In, *Networks, Resources, and Economic Action: Ethnographic Case Studies in Honor of Harmut Lang*, Greiner, C. & W. Kokot, (eds.) Dietrich, Reimer, Verlag.

Bernard, H. R., Pelto, P. J., Werner, O., Boster, J., Romney, A. K., Johnson, A., ... & Kasakoff, A. (1986). The construction of primary data in cultural anthropology. *Current Anthropology*, 27(4), 382-396.

Borgatti, S. P. (2002). A statistical method for comparing aggregate data across a priori groups. *Field Methods*, 14(1), 88-107.

Borgatti, S. P. (1999). Elicitation techniques for cultural domain analysis. *Enhanced ethnographic methods*, 3, 115-151.

Borgatti, S.P. (1997). Proximities. Retrieved from: <http://www.analytictech.com/borgatti/proximit.htm>

Borgatti, S.P. (1994). Cultural Domain Analysis. *Journal of Quantitative Anthropology* 4: 264-278.

Boster, J. S. (1987). Introduction. *American Behavioral Scientist* 31: 150-162.

Brewer, D. D. (2002). Supplementary interviewing techniques to maximize output in free listing tasks. *Field methods*, 14(1), 108-118.

Chavez, L. R., Hubbell, F. A., McMullin, J. M., Martinez, R. G., & MISHRA, S. I. (1995). Structure and meaning in models of breast and cervical cancer risk factors: a comparison of perceptions among Latinas, Anglo women, and physicians. *Medical anthropology quarterly*, 9(1), 40-74.

Chibnik, M. (1985). The use of statistics in sociocultural anthropology. *Annual Review of Anthropology*, 14(1), 135-157.

Collins, C. C., & Dressler, W. W. (2008). Cultural models of domestic violence: Perspectives of social work and anthropology students. *Journal of social work education*, 44(2), 53-74.

D'Andrade, R. G. (1995). *The Development of Cognitive Anthropology*. Cambridge, UK: Cambridge University Press (pgs. 1-15)

Dressler, W. W., Borges, C. D., Balieiro, M. C., & Dos Santos, J. E. (2005). Measuring cultural consonance: Examples with special reference to measurement theory in anthropology. *Field Methods*, 17(4), 331-355.

Dressler, W. W., & Bindon, J. R. (2000). The health consequences of cultural consonance: Cultural dimensions of lifestyle, social support, and arterial blood pressure in an African American community. *American anthropologist*, 102(2), 244-260.

Ensign, J., & Gittelsohn, J. (1998). Health and access to care: Perspectives of homeless youth in Baltimore City, USA. *Social Science & Medicine*, 47(12), 2087-2099.

- Gravlee, C. C., Bernard, H. R., Maxwell, C. R., & Jacobsohn, A. (2013). Mode effects in free-list elicitation: comparing oral, written, and web-based data collection. *Social Science Computer Review*, 31(1), 119-132.
- Guest, G., & McLellan, E. (2003). Distinguishing the trees from the forest: Applying cluster analysis to thematic qualitative data. *Field Methods*, 15(2), 186-201.
- Gravlee, C. C. (2005). Ethnic classification in southeastern Puerto Rico: the cultural model of "color". *Social Forces*, 83(3), 949-970.
- Hanneman, R. A. and M. Riddle (2005). *Introduction to social network methods*. Retrieved from: [http://faculty.ucr.edu/~hanneman/nettext/C5\\_%20Matrices.html](http://faculty.ucr.edu/~hanneman/nettext/C5_%20Matrices.html)
- Hruschka, D. J., Sibley, L. M., Kalim, N., & Edmonds, J. K. (2008). When there is more than one answer key: cultural theories of postpartum hemorrhage in Matlab, Bangladesh. *Field Methods*, 20(4), 315-337.
- Johnson, J. and S. Weller (2002). Elicitation Techniques for Interviewing. In, *Handbook of interview research: Context and method.*, Gubrium, J. F., & Holstein, J. A. (eds.). Sage.
- Koster, J. (2011). Interhousehold meat sharing among Mayangna and Miskito horticulturalists in Nicaragua. *Human Nature*, 22(4), 394-415.
- Lieberman, D., & Dressler, W. W. (1977). Part four: Bilingualism and cognition of St. Lucian disease terms. *Medical Anthropology*, 1(1), 81-110.
- Macauda, M. M., Erickson, P. I., Singer, M. C., & Santelices, C. C. (2011). A cultural model of infidelity among African American and Puerto Rican young adults. *Anthropology & medicine*, 18(3), 351-364.
- Necheles, J. W., Chung, E. Q., Hawes-Dawson, J., Ryan, G. W., Williams, L. S. B., Holmes, H. N., ... & Schuster, M. A. (2007). The teen photovoice project: a pilot study to promote health through advocacy. *Progress in community health partnerships: research, education, and action*, 1(3), 221.
- Plattner, S. (2004). Human subjects protection and anthropology. *Anthropology Newsletter*, 45(2): 5.
- Quinlan, M. (2005). Considerations for collecting freelists in the field: examples from ethobotany. *Field methods*, 17(3), 219-234.
- Reyes-García, et al. V., Gravlee, C. C., McDade, T. W., Huanca, T., Leonard, W. R., & Tanner, S. (2010). Cultural consonance and psychological well-being. Estimates using longitudinal data from an Amazonian society. *Culture, Medicine, and Psychiatry*, 34(1), 186-203.
- Romney, A. K., Weller, S. C., & Batchelder, W. H. (1986). Culture as consensus: A theory of culture and informant accuracy. *American anthropologist*, 88(2), 313-338.
- Smith, K. D., Smith, S. T., & Christopher, J. C. (2007). What defines the good person? Cross-cultural comparisons of experts' models with lay prototypes. *Journal of Cross-Cultural Psychology*, 38(3), 333-360.
- Thompson, E. C., & Juan, Z. (2006). Comparative cultural salience: measures using free-list data. *Field methods*, 18(4), 398-412.

Weller, S. (2014). Structured Interviewing and Questionnaire Construction. In, *Handbook of Methods in Cultural Anthropology*, Bernard, H. R. and C. C. Gravlee (eds.). Rowan & Littlefield.

Weller, S. C. (2007). "Cultural Consensus Theory: Applications and Frequently Asked Questions." *Field Methods* 19(4): 339-368.

Weller, S. C. (1984a). Consistency and consensus among informants: Disease concepts in a rural Mexican village. *American Anthropologist*, 86(4), 966-975.

Weller, S. C. (1984b). Cross' Cultural Concepts of Illness: Variation and Validation. *American Anthropologist*, 86(2), 341-351.