Death, Dying and Bereavement
Body Disposition: Trends and Statistics
DUE MARCH 23, 2016

In this exercise we will examine trends and statistics in body disposition both in the United States and the world drawing on a variety of sources of information including course readings and discussions, articles, and raw data on cremation (e.g., from the Cremation Association of North America). In so doing, this assignment will give you experience critically analyzing quantitative data and understanding why variation exists, applying information we have discussed and reviewed on religion and culture and death rituals to primary data. There are several goals of this assignment:

- To understand the interrelationships among religion, culture, and body disposition practices by examining geographic variation and historical trends in cremation and body disposition in the US and the world.
- To be able to distinguish between an absolute number and a rate, and how to calculate and express a rate. Moreover, to apply this understanding to make arguments and understand societal trends and regularly question data that plays on the distinction between absolute numbers and rates.
- To prepare a line chart using Excel to document trend data on cremation rates in the US.
- To correctly write about quantitative data (including absolute numbers, rates, and percentages).
- To engage in primary research and effectively undertake the various stages of the research process (e.g., review literature, develop hypotheses, collect data, evaluate data, and develop conclusions).
- To effectively synthesize information from a variety of sources to explain data and make arguments.
- To correctly cite books, articles and web sources both within the text of a paper and in a bibliography using the American Sociological Associations (ASA's) style guidelines.

This assignment is due March 23, 2016. The assignment should be approximately 5-6 pages long (plus bibliography) and it must be typed. Questions #1-4 are worth 20%; Question #5 is worth 15% and Question #6 is worth 5%. You may respond to each question by numbering them (in other words, this need not be one coherent essay – you can answer the questions separately).

EVALUATION OF ASSIGNMENT

Your assignment will be graded on:

(1) **Accuracy and completeness of information and data presented**. For example, are all the questions answered? Is the information and/or the correct data presented? Is the assignment free of quantitative errors in calculation and/or reporting? Is the line graph accurate with appropriate labels, etc.?
(2) **Organization and mechanics of writing, including grammar, punctuation and bibliographic formatting**. For example, are the paragraphs well-organized with transitions between them? Are the responses free of awkward phrases/writing? Is the assignment free of spelling errrors, typos, run-on sentences, grammatical mistakes, etc.? Are the sources correctly cited?
(3) **Argumentation, synthesis of information, interpretation and reasoning**. For example, are the quantitative data correctly interpreted? Does the assignment make good use of the course materials (including course readings) to explain the results? Are the suggested sources used appropriately? Do the

hyptheses and explanations make sense? Do the responses to the questions show evidence of a synthesis of course materials, including readings and discussions?

In general, in assigning grades I place the greatest emphasis on (3) (that is, **argumentation, synthesis of information, interpretation, and reasoning**). However, some of the questions focus specifically on certain elements above. For example, question #5 focuses only on your bibliography.

Whenever you copy anything directly from the readings or Internet, be sure to use quotation marks! Otherwise, please reword the material in your own words (but include citations!)! Meanwhile, please do not only copy material from the Internet – I want you to also put the information in your own words. You should only copy in exceptional circumstances!

PLEASE NOTE THAT EVERY STUDENT MUST DO THIS ASSIGNMENT INDIVIDUALLY. WHILE YOU ARE WELCOME TO DISCUSS THIS ASSIGNMENT WITH OTHERS, YOUR WORK MUST REFLECT AN INDIVIDUAL EFFORT. PLEASE DO NOT SHARE EXCEL QUESTION ANSWERS, GRAPHS, BIBLIOGRAPHIES, ETC.!

ASSIGNMENT QUESTIONS

[1] Please read and learn more about body disposition and cremation using several sources including (a) the class readings (the class textbook, the book *Stiff* by Roach and the book *Final Rites* By Slocum and Carlson); (b) Michelle Kim's article, "How Cremation Works" (http://health.howstuffworks.com/diseases-conditions/death-dying/cremation7.htm); (c) the Cremation Association of North America (CANA) website (http://www.cremationassociation.org/?page=HistoryOfCremation); and (d) Wikipedia (https://en.wikipedia.org/wiki/Cremation). In your answers be sure to *synthesize the information* and do not to just copy from these websites or the textbook.

A. When did cremation first begin and where? Please draw on at least two websites indicated above that provide conflicting information.

B. Historically (prior to the 20th century), where has cremation been practiced and by what groups (please include a rich response that indicates multiple places and groups)? Please provide specific evidence from at least two web sites indicated above **as well as** the class readings.

C. What do different religious/cutural group have to say/believe about cremation?   Please provide specific evidence from at least two web sites indicated above **as well as** the class readings (and the class presentations!).   Please provide information for at least 6 different groups, including at least one in favor and another opposed to cremation.

[2] Explaining variation in cremation in the United States. Please note that when I ask about total numbers of cremation, I mean just that – total # of cremations. Meanwhile, demographically-speaking a rate expresses an event (e.g., cremation) relative to a population at risk (deaths, in the case of a cremation rate). When I ask about the cremation rate, I am referring to the percent of deaths that end in cremation (that is, the total number of cremations divided by the total number of deaths, and multiplied by 100). For example, in 2014 46.7% of deaths wound up in cremation. This means that **on average for every 100 deaths, there were approximately 47 cremations in the US 2014**. The 46.7% was calculated as follows: 1,214,146 (2014 cremations in the US)/2,599,012 (2014 deaths in the US)*100.

A. Before you do any analysis, address these questions: What states (in the US) would you expect to have the highest total number of cremations? What states would you expect to have the highest rates

of cremation? What states would you expect to have the lowest total number of cremations?   What states would you expect to have the lowest rates of cremation? Be sure to *explain why* you made the hypotheses (predictions) you did!

Look at the *Cremation Association of North America (CANA) Annual Statistics Report 2014* (this is in the assignments section of Blackboard) to investigate variation in cremation rates in the United States:

B. For the state that you have been assigned (state assignments are also in the assignment section of Blackboard), please use the data from page 4-5 of the CANA report to illustrate how the 2014 cremation rate (% of deaths cremated) is calculated. Go through the process of doing the actual calculation and **show your work** for your state. After you have done this, please interpret the rate (that is, the % of deaths cremated for your assigned state) as we have done in class.

C. Look at the table on cremations in each of the US states (pages 4-5 of Report). What state had the highest TOTAL number of cremations in 2014? What state had the highest cremation RATE (that is, the highest percent of cremations) in 2014? Please explain why the state with the highest total number of cremation is not the same at the state with the highest percent of cremations. Describe a situation where it would be useful to know the total number of cremation and explain why. Describe a situation where it would be useful to know the percent of cremations and explain why.

D. Look at the data on the states with the highest percentage and the lowest percentage of cremation deaths (again on pages 3-4)! Please make sure to focus on the highest and lowest percentages!   What five states had the highest proportion/percentage of deaths that ended up cremation in 2014 (indicate the top five and indicate the percentages of deaths that ended in cremation for those states)? What five states have the lowest proportion/percentage of cremation deaths in 2014 (note the lowest five, and indicate the percentage of deaths that ended in cremation for those states)? What factors might account for these differences? (Feel free to discuss this with your colleagues, friends or family members!) Did your findings confirm (or challenge) your hypotheses/predictions? Why (or why not?)?

[3] Explaining variation in cremation in the world.

A. What countries (in the world) would you expect to have the highest rates of cremation in the world? What countries would you expect to have the lowest rates of cremation? Please explain your answer and why you made the predictions you did.

Next, look at some actual data. (Some information is provided in the CANA report in Blackboard on page 11, but Wikipedia also has useful information here:
https://en.wikipedia.org/wiki/List_of_countries_by_cremation_rate

As does this article in the Economist:
http://www.economist.com/blogs/graphicdetail/2012/10/daily-chart-16

B. What are some of the countries with the highest and lowest cremation rates/percentages? Be sure to look at the percentage column(s) and indicate information for at least 3 countries with high cremation rates and 3 countries with low cremation rates. Please explain how the cremation rates have been calculated for different countries.

C. What factors might account for the differences in cremation rates that you have identified?   In other words, please explain why some countries have high rates of cremation and other countries have low rates of cremation (Feel free to discuss this with your colleagues and please consider the role of religion and culture in explaining these differences.). Please relate the findings to your hypothesis that you articulated about what countries you thought would have the highest (and lowest) rates of

cremation. If the data were not available for a country where you put forward a hypothesis, you can indicate that (data for all countries' cremation rates are not available). There is a map on Wikipedia that indicates that religious distribution in different countries and this may be helpful in understanding variation in body disposition practices: http://en.wikipedia.org/wiki/Religions_by_country

 [5] Include a bibliography that correctly cites all the sources (including web sources) you have used for this assignment. Please note that there are instructions in the final section of the Reader packet for how to correctly cite web sources. Please refer to the ASA style guidelines that are included in the Reader Packet section of Blackboard (the document titled "Part Five" will show you how you correctly cite Internet/electronic sources)!   Please note you will also want to make sure you have also correctly used parenthetical citations within your answers to each of the questions. Please be sure to list sources in alphabetical order in your bibliography by the last name of the first author(s). Be sure not to share your bibliography with other students!

[6] Bringing everything together for this assignment. Please address each of the following:

A. When you hand in this assignment, please hand in a **signed statement** that reads, "This statement certifies that all written work handed in in this assignment (including answers to the questions, Excel graph and bibliography) is mine alone and I have not shared my written work with any other student for assignment. I understand that the penalty for doing any of this is a failing grade for this assignment." Please make sure you sign this statement and that it truly reflects how you approached this assignment!
B. Please indicate the most important thing you learned from undertaking this assignment.
C. Please indicate how you would you recommend improving this assignment?

Instructions for making graph using Excel

IF USING MS OFFICE 2003:

(a) Open up Excel
(b) In cell A1 write "Year"
(c) In cell B1 write "Percent of deaths that were cremated" (or some similar label)
(d) Enter the data in Excel as follows: (I have used 4-year intervals here, but you need to use at minimum **2-year intervals**.). I will automatically add one point to your grade if you use single-year intervals!

Year	Percent of deaths that were cremated
'1960	3.56
'1964	3.76
'1968	4.35
'1972	4.94
1976	Etc.

(e) Highlight the rows and columns you want to graph (only those that have writing in them – nothing more, nothing less!).
(f) Go to insert and select "chart."
(g) Select "scatterplot" and click "next' (make sure you select a scatterplot with lines that connect the dots)
(h) The chart automatically assumes you want to call it "Percent of cremation deaths" – but please change the title – perhaps something like "Trends in Cremation from 1958 to 2010 in the United States."
(i) Your category (x) axis: is "Year"
(j) Your category (y) axis is "Percentage."
(k) Click "Next"
(l) Select "as new sheet in chart 1"
(m) Now select your chart (by using the mouse to click on all of it – when you do so, little tick marks will appear in the corners of the chart'), copy it, and paste it in a Word document. Put your name in the corner!

IF USING MS OFFICE 2007/2010:

(n) Open up Excel
(o) In cell A1 write "Year"
(p) In cell B1 write "Percent of deaths that were cremated" (or some similar label)
(q) Enter the data in Excel as follows: (I have used 4-year intervals here, but you need to use at minimum **2-year intervals.**) I will automatically add one point to your grade if you use sing-year intervals.

Year	Percent of deaths that were cremated
'1960	3.56
'1964	3.76
'1968	4.35
'1972	4.94
	Etc.

(r) Highlight the rows and columns you want to graph (only those that have writing in them – nothing more, nothing less).

(s) Go to insert and select "scatter"

(t) In the Scatter option, make sure you select a scatterplot with lines that connect the dots. Once you select this, the chart will automatically get placed in your Excel sheet. Sometimes the yearswill appear on the y-axis rather than the x-axis, depending on your settings. If that happens, go to "select data" (in the chart tools tab) and select "switch row/column.")

(u) Since Excel will automatically place the chart within your sheet, while you're in the "design" tab, select "move chart location" and select "New sheet: Chart 1" and click "OK." Now your chart will be in a new page. At the bottom of the page, you can click on the sheet 1 tab to go back to your data.

(v) The chart automatically assumes you want to call it "Percent of cremation deaths" – but please change the title – perhaps something like "Trends in Cremation from 1958 to 2010 in the United States." You can simply go to the title and change it by writing over it

(w) To add labels to the X and Y axis, go to "Layout" and select "Axis titles."   Here you will want to select "Primary Horizontal Axis title" and select "Title Below Axis" and type in "Year." You will also want to select "Primary Vertical Axis Title" and indicate how you want the title to appear (whatever way you select is fine with me) and type in the title!

(x) It may have a legend now that says "Series 1" – you can just highlight this and delete it since it's not necessary.