

# Educating the Educator: GIS for Integrative Learning

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# HACA COLLEGE

# Problem

GIS is becoming a necessary tool in many disciplines

# Faculty do not...

- know about GIS or how it can enhance their research
- have the computational skills to learn GIS
- have the time to learn GIS
- have the knowledge to incorporate GIS into their research



## ACA COLL

# The IC Solution

- Provide reassigned time to faculty
- Create student-faculty groups within the class
- Provide a GIS support system
- Establish a learn/practice/use/publish cycle for faculty members



## ACA COI

# Spring '11

Class of 12, including 3 faculty and 1 professional

# Examples of Resulting Projects from Faculty

- Involved students in religion course
- Integrated into ongoing historical research







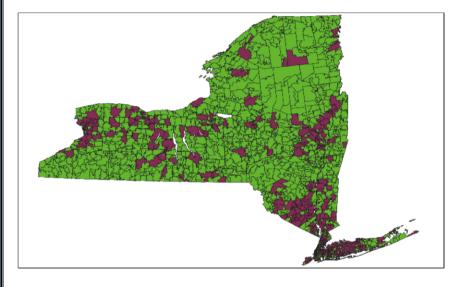


### The New York State Occupational Therapy Association Membership Year 2010-2011

# Julie Ann Nastasi, OTD, OTR/L, SCLV Ithaca College

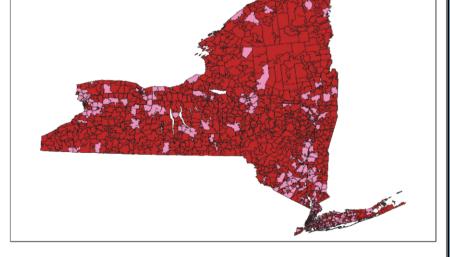
#### **Current NYSOTA Membership**

- The New York State Occupational Therapy Association currently has 811 members from across New York State.
- The areas shaded in purple below represent where the current members live.



#### Current Non-Renewed NYSOTA Members

• NYSOTA currently has 496 non-renewed members. • The areas shaded in purple below represent where the non-renewed members live.



<b>Current Licensed Occupational Therapists &amp; Assistants</b>						
County	OTs	OTAs	County	OTs	ΟΤΑ	
Albany	146	83	Niagara	92	70	
Allegany	9	9	Oneida	192	58	
Bronx	181	131	Onondaga	220	49	
Broome	88	12	Ontario	94	14	
Cattaraugus	20	40	Orange	198	259	
Cayuga	22	4	Orleans	4	16	
Chautauqua	47	67	Oswego	31	26	
Chemung	37	8	Otsego	29	18	
Chenango	20	8	Putnam	68	10	
Clinton	24	8	Queens	891	464	
Columbia	25	19	Rensselaer	58	41	
Cortland	12	4	Richmond	189	29	
Delaware	8	5	Rockland	290	200	
Dutchess	149	65	Saratoga	163	53	
Erie	600	418	Schenectady	92	63	
Essex	15	8	Schoharie	4	9	
Franklin	14	9	Schuyler	11	2	
Fulton	10	14	Seneca	22	7	
Genesee	24	49	Steuben	40	10	
Greene	16	12	St. Lawrence	25	41	
Hamilton	1	0	Suffolk	793	254	
Herkimer	50	39	Sullivan	26	31	
Jefferson	39	11	Tioga	26	3	
Kings	854	242	Tompkins	42	4	
Lewis	12	6	Ulster	82	53	
Livingston	30	22	Warren	29	17	
Madison	21	14	Washington	15	12	
Monroe	337	65	Wayne	53	19	
Montgomery	24	18	Westchester	551	111	
Nassau	1072	153	Wyoming	10	39	
New York	681	76	Yates	27	3	

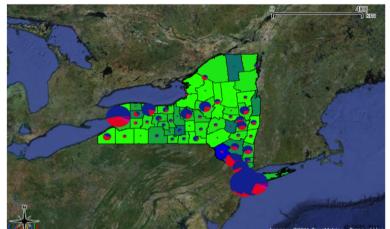
A special thank you to Ali Erkan for all of his assistance with this project.



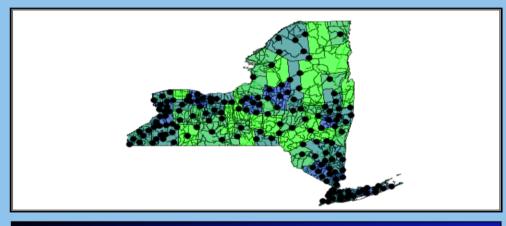
#### Where Do OTs and OTAs Live?

Blue = OTsPink = Expired Members

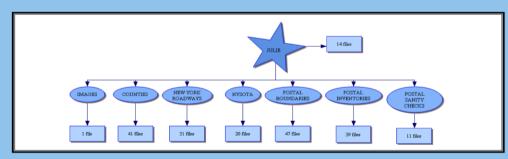
Red = OTAs Magenta = Current Members



#### **Recommended Locations for NYSOTA Events**



### File Management



## **Abrahamic Religions in the New York Times:** January 1-April 30, 2011

Nancy Menning, with students in RLST 10600 (section 2), Spring 2011 Department of Philosophy & Religion, Ithaca College

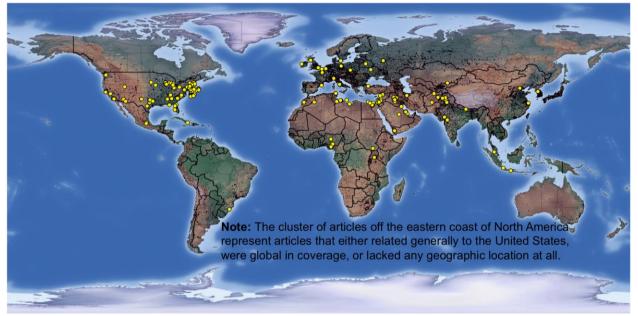


Figure 1. New York Times coverage of the Abrahamic religions, Jan 1-Apr 30, 2011. All 506 mapped articles

## **INTRODUCTION**

This project maps New York Times coverage related to Judaism, Christianity, and Islam over a four-month period (January 1 through April 30, 2011). Students in Section 2 of RLST 10600 (Intro to World Religions: Western and Modern) searched the New York Times database, selected the relevant news and feature articles, and entered essential data into a database. The location of those news stories and feature articles were then mapped using Quantum GIS (qGIS).<sup>1</sup>

#### Learning objectives

- 1. Evaluate complementary relationships between the academic study of religions and critical engagement with media representations.
- $\circ$  How does knowledge developed over the course of the semester help us interpret news events? How does current news coverage enrich our background knowledge of these three religions?
- What additional information do we need to fully understand news events and respond appropriately as informed and engaged citizens?
- $\circ$  To what extent do news filters shape (and distort) perceptions of religions and their adherents?
- 2.Explore how the spatial representation (and associated analysis possibilities) of this data enriches our discussion of media portrayals of the Abrahamic religions.

## **DATA COLLECTION**

#### NYT search, data entry, and mapping<sup>2</sup>

	Search string	# of hits	# judged relevant (%)
Judaism	Judaism or Jew or Jewish	824	138 (17%)
Christianity	Christianity or Christian or Protestant or Catholic	1211	135 (11%)
Islam	Islam or Muslim or Islamic or Sunni or Shiite	1041	226 (22%)
OVERALL		2727 <sup>3</sup>	506 (19%) <sup>4</sup>

### RESULTS

### Data collection and display

✓ Of 2,727 articles reviewed, 506 (19%) were judged relevant to the overall project, and were included in the database. See Figure 1.

 $\checkmark$  In the mapped representation, news articles were colorcoded by primary religion covered. See Figure 2.

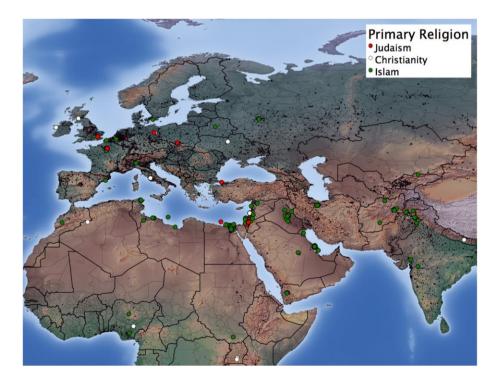


Figure 2. NYT coverage by religion in Europe, northern Africa, and central Asia.

## REFLECTIONS



instructor research.

## **RESULTS CONT'D**

#### Data analysis and interpretation

✓ The average location (coordinate means) for both Judaismrelated and Christianity-related articles was in the middle Atlantic. Islam-related articles had their mean location just off the coast of Tripoli, Libya.

✓ Classroom experience provided the necessary background for understanding and interpreting NYT content. Reading the NYT against that background brought our understanding of these religious traditions into the real world.

✓ Articles reviewed included coverage of the largely nonideological (non-religious) nature of the ongoing Arab Spring; a gathering (in Utah) of young, affluent Jews to explore their ethnic and religious identities; and new evangelical church starts in the East Village.<sup>5</sup>

> Media coverage and academic study are complementary, producing greater understanding when engaged in tandem. Spatial representation of data helped illuminate both the presence and absence of media coverage, relative to populations of religious adherents.

Most of the interesting stuff is underneath the hood, both of the computer and of the human. Assessing the relevance of newspaper coverage and interpreting the results is anything but automatic, giving rise to data quality challenges. Moreover, the GIS technology can do many things, not all of which are appropriate given a disparity between the spatial precision of the GIS representation and the spatial generality of the underlying data.

### **REFERENCES & TECHNICAL NOTES**

<sup>1</sup> The raster backdrop is a 1:10m cross-blended hypsometric raster (tiff) with shaded relief and water from naturalearthdata.com. Datum is WGS84.

<sup>2</sup> Twenty-three students plus the instructor participated in a distributed data search and entry. Subsequent database work as well as GIS mapping and analysis was performed by the

<sup>3</sup> Adds to less than total of column due to multiple hits in individual articles.

<sup>4</sup> Includes seven articles with primary religion coded as other than the Abrahamic religions. though the articles still contained sufficient Abrahamic content to merit inclusion in this

<sup>5</sup> Michael Slackman. "Bullets Stall Youthful Push for an Arab Spring [Foreign Desk]." New York Times, March 18, 2011, Late Edition (east Coast). Laura M. Holson. "You're Young And Jewish: Discuss [Style Desk]." New York Times, January 16, 2011, Late Edition (east Coast). John Leland. "The God Squad [Metropolitan Desk]." New York Times, April 24, 2011, Late Edition (east Coast), All: http://www.proquest.com/ (accessed May 11, 2011)

# Spring '12

- Looking for faculty proposals
- Students register for classes this week
- Exploring ways to incorporate GIS into IC's general education requires
- Establishing support structures for faculty research



## ACA COL