

Passages, Movements, and Interactions: MAD-AAG 2019



November 15, 2019

USGS

5522 Research Park Drive
Catonsville, MD 21228

09:00AM – 09:15AM	Welcome and Announcements		
<p>09:15AM – 10:15PM</p> <p>Visualizing Landuse in Diverse Contexts</p>	<p>Malaria Risk in Myanmar: Contextualizing Remotely Sensed Land Cover Data with Qualitative Land Use Data to Inform Targeted Interventions</p> <p>Amanda Hoffman-Hall (with Tatiana V. Loboda, Robin Puett, Julie A. Silva, Dong Chen, Allison E. Baer) Department of Geographical Sciences University of Maryland College Park</p>	<p>Agrarian Transition in The Uplands of Central Vietnam: Drivers of Market-Oriented Land-Use and Land-Cover Change</p> <p>Kirk Saylor Geography and the Lab for Anthroecology University of Maryland, Baltimore County</p>	<p>More than a “Hammer”: The Role of the State Data Center in Developing Tools to Inform Transportation Policy</p> <p>William L Kiskowski Maryland Department of Planning Maryland State Data Center</p>
<p>10:15 - 10:30 AM</p> <p>BREAK poster presentation/ discussion during the break</p>	<p>Mapping Power Stations and Coal Combustion Residuals in the Chesapeake Bay Watershed</p> <p>Ben Oelke Geography & Environmental Planning Towson University Poster</p>		

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<p>10:30AM – 12:00PM</p> <p>Diverse Perspectives on Geographic Diversity</p> <p>This session celebrates the AAG Diversity Ambassadors' initiative to raise awareness around matters of diversity.</p>	<p>In Search of Homo avimimus: Archaeo-ornithological, ethno-ornithological, and historical explorations of how birds made us human</p> <p>Rob Fergus Geography, Planning, and Sustainability Rowan University</p> <p>It's Not All Greek to Me: The Etruscan Ephemeral and the Grecian Material</p> <p>David Bauer Geography and Environmental Planning Towson University</p>	<p>African or Indian? Examining Siddi People and their Sense of Place Using a Photo Essay</p> <p>Sumanth Reddy Department of History & Government Bowie State University</p>	<p>There is no <i>Place</i> Like Home</p> <p>Sydney Trionfo Geography and Environmental Planning Towson University</p>
<p>12:00 - 1:30 PM LUNCH</p>	<p>Keynote, Dave Kapland, President, AAG; Editor-in-Chief <i>Geographical Review</i>; Professor, Kent State University; FOM—“Friend of MAD”</p>	<p>OPEN BUSINESS MEETING</p> <p>Membership, Activities and Serving the Community, Revenue, GeoBowl, Board Member Terms and Committees, and attendee items</p>	

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<p>1:30PM – 3:30PM</p> <p>“You Shouldn't Live Here/I don't want to Live Here/Can I live Here?” Socio-Economic-Physical Perspectives</p> <p>This session continues the celebration of the AAG Diversity Ambassadors' initiative to raise awareness around matters of diversity.</p>	<p>Weather-related Influences on Rural-to-urban Migration: A Spectrum of Attribution in Beira, Mozambique</p> <p>Kelly Anderson and Julie Silva, Ph.D. Geographical Sciences University of Maryland, College Park</p> <p>The Perfect Storm</p> <p>Tiffany DeBoer Geography & Environmental Planning Towson University</p>	<p>A Study of the 1931 China Floods</p> <p>Sidney Losey Geography & Environmental Planning Towson University</p> <p>We Can't Afford to live here: Deconstructing MSAs and cities with low median rental prices</p> <p>DeCarlo Brown Geography & Environmental Planning Towson University</p>	<p>Liberal Mutants and Illiberal Institutions: “The Gifted” and the securitization of immigration</p> <p>Katrinka Somdahl-Sands Political Science and New Jersey Geographic Alliance Rowan University</p>
<p>3:30PM – 3:45PM BREAK</p>			
<p>3:45 - 4:45</p>	<p>AAG WORKSHOP: Geography Student Recruitment and Career Resources</p>	<p>FACILITATORS Emily Fekete, AAG Mark Revell, AAG Coline Dony, AAG</p>	

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<p>4:45PM – 5:00PM Stroll, Run, Drive to Sondheim Hall, UMBC for the annual MAD GeoBowl</p> <p>5:00pm - 7:30pm</p>	<p>ANNUAL MAD-AAG GeoBowl</p>		
<p>THANK YOU!!</p>	<p>See you next year in Downtown Baltimore for the Combined RACE-ETHNICITY-PLACE and MAD-AAG 2020 CONFERENCE</p>		

Presenters

Malaria Risk in Myanmar: Contextualizing Remotely Sensed Land Cover Data with Qualitative Land Use Data to Inform Targeted Interventions

Amanda Hoffman-Hall (with Tatiana V. Loboda, Robin Puett, Julie A. Silva, Dong Chen, Allison E. Baer)
Department of Geographical Sciences
University of Maryland College Park

Despite considerable progress towards elimination, malaria remains a global public health crisis. The urgency of malaria elimination is high in South East Asia where there has been documented emergence of drug resistant malaria parasites, despite overall low malaria transmission. This presents a challenge in that the remaining reservoirs of malaria are heterogeneous and complex. Models which explain vector densities have contributed to much of the progress but are hindered by a lack of information on human behavior related risk factors. Previous studies have shown relationships between malaria risk and land cover and land use, the former of which can be mapped using remote sensing methodologies. This research more fully explains malaria risk as a function of land use and land cover over 5 villages within the remote Ann Township in Myanmar by combining a malaria occurrence and land use survey of ~1000 participants with a 30m land cover map derived from remotely sensed datasets. We find that villages with high forest cover are strongly associated with increased risk of malaria, even for villagers who do not frequent forested lands. Villagers living near large areas of croplands experience decreased malaria risk, unless they are specifically farm workers. This is especially true for males, for whom our results indicate a strong increase in risk for farm workers, but a protective effect for males who only live near croplands. Overall, by contextualizing remotely sensed data with qualitative data our research can inform vector-based models to increase the efficiency of critical targeting strategies.

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KEYWORDS: Malaria, Myanmar, land use and land cover change, vector-based models

Agrarian Transition in The Uplands of Central Vietnam: Drivers of Market-Oriented Land-Use and Land-Cover Change

Kirk Saylor

Geography and the Lab for Anthroecology
University of Maryland, Baltimore County

This study presents an analysis of changing land-use and land-cover in the North-Central Coast region of Vietnam in recent decades, during which rural upland communities have become partially integrated into commodity markets. Market integration has resulted from the extension of transportation network infrastructure under the East-West Economic Corridor (EWEC) project completed in mid-2006. This project has improved market connectivity and accessibility between rural and urban areas, creating flows of goods, information, and money induce agrarian transition and influence land-use / land-cover change processes. Analysis of satellite imagery over the last decade shows some signs of possible agricultural intensification along the Highway 9 corridor, while elsewhere in the study area a clear and consistent trendline cannot be ascertained. Confounding factors include usability of imagery, temporal gaps in collection, and the resolution of available and usable imagery. The pattern of changing land-cover emerging along Highway 9 is hypothesized to result from changing land rents, where lower transportation costs and higher agricultural prices increase the profitability of cash cropping, incentivizing local populations to engage in market-oriented production. Such a microeconomic response would be consistent with von Thünen's extrinsic theory of land rent, as well as the multi-scalar frameworks of teleconnections and telecoupling. These dynamics are explored at the village level through a spatially explicit agent-based model that simulates household decision-making using empirically-fitted rules, to better understand the process of transition from subsistence cropping to a mixed mode of production with cash cropping.

KEYWORDS Agrarian transition, Vietnam, land use and land cover change, agent-based model

More than a “Hammer”: The Role of the State Data Center in Developing Tools to Inform Transportation Policy

William L Kiskowski

Maryland Department of Planning
Maryland State Data Center

This paper discussion focuses on the support role of the State Data Center in developing tools to inform transportation policy. The Transit-Oriented Development (TOD) application is a product of the Maryland Department of planning that offers a visualization of feature data at a level scale that relates to the use of transit stations. The decisions to use various types of data over others, levels of scale at which the data is available, and the desired function of the tool are all critical considerations when building such a model or tool. I will exhibit the TOD tool, expecting criticism and feedback as well as possible inspiration for

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future projects or new directions for this type of effort. The state as a whole is moving towards a visualization presentation for data products, to ultimately replace the reports and static data sheets we have produce in the past.

Links to application:

[https://maryland.maps.arcgis.com/apps/MapSeries/index.html?](https://maryland.maps.arcgis.com/apps/MapSeries/index.html?appid=5cc549f158954c259658a55ceadfdc6b)

[appid=5cc549f158954c259658a55ceadfdc6b](https://data-maryland.opendata.arcgis.com/pages/mdp-tod)

<https://data-maryland.opendata.arcgis.com/pages/mdp-tod>

Keywords: GIS Applications, Transit-Oriented Development, Transportation, ACS, Census, Data

Mapping Power Stations and Coal Combustion Residuals in the Chesapeake Bay Watershed

Ben Oelke

Geography & Environmental Planning

Towson University

Poster

Humans have relied heavily on fossil fuels since the start of the industrial revolution in the mid 1700's, at the time the primary fossil fuel used was coal. While the fossil fuel coal has been a staple for centuries, the use of coal today as a fuel source is beginning to become outdated. The Industry is struggling to survive under the current conditions, science and technology is evolving so rapidly that there are now more efficient sources, which are either green energy, natural gas, or oil. While coal is no longer the first option as an energy source, we can't simply ignore the history of coal. Coal has left behind such a large foot print on the environment, through the mining and burning for centuries, which has created Coal Combustion Residuals (CCR's), better known as fly ash, which is full of harmful heavy metals and other chemicals. These CCR's that can be devastating to an ecosystem and are typically dumped back into mines that have already been mined to its full extent. Looking at the distribution within Maryland many of the dump sites are extremely close to our state's waterways, and urban areas; the City of Frostburg and Cumberland are two examples which could have a direct effect on our residents.

KEYWORDS: Coal Combustion Residuals, energy supply, health,

In Search of Homo avimimus: Archaeo-ornithological, ethno-ornithological, and historical explorations of how birds made us human

Rob Fergus

Geography, Planning, and Sustainability

Rowan University

Animal geographers have long explored humans impacts on animals, including through hunting, domestication, habitat loss, and conservation. What remains under-explored are the ways that birds and other animals have influenced humans. We know that the Wright brothers invented powered flight by

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observing and mimicking birds, but what is the time depth of human bird-mimicry in human history and pre-history? This paper presents the hypothesis that much of our unique human biological and cultural evolution was driven by interactions with and often mimicry of birds, with data supporting bird connections to the rise of frugivory, primate color vision, bipedality, scavenging, fishing, mollusk harvesting, rafting, language, sewing, weaving, music, dancing, ceramics, arboriculture, ocean voyaging, and writing. The current evidence supporting this hypothesis warrants more extensive research into the role of birds in human evolution and cultural development.

KEYWORDS: Animal geography, birds, coevolution, traditional knowledge

It's Not All Greek to Me: The Etruscan Ephemeral and the Grecian Material

David Bauer

Geography and Environmental Planning
Towson University

On the surface Etruscan and Greek cities shared many characteristics. Their cities were laid out in similar orientations, they borrowed each others' building styles and through cultural exchange they shared many of the same deities and mythologies. Yet while we can tour many Greek cities and can clearly see evidence of their habitation, most of what we know about Etruscan cities comes from less evident sources; we have tombs, secondary accounts and material culture. What about the location of these two cultures impacted the durability of their cities? What cultural values led one culture to build lasting architectural marvels and the other to create far more ephemeral buildings. What can we learn about both from what is left behind?

KEYWORDS: Etruscan and Greek Cities, Historical Geography, Material Culture

African or Indian? Examining Siddi People and their Sense of Place Using a Photo Essay

Sumanth Reddy

Department of History & Government
Bowie State University

The Siddi people of India are descendants of Bantu populations of East and Central Africa. They were brought to India in several waves for different purposes starting as early as in the 6th century. Some were brought as slaves and soldiers while others came as traders and merchants. Eventually, many of them settled in a few areas of India primarily in the states of Goa, Gujarat, Karnataka, and Telangana. Although many Siddis look more African (Bantu) than Indian, India is the only country they have ever known and affiliate with. This photo essay examines topophilia among Siddis in the south Indian state of Karnataka. The concepts of a sense of place and belonging are vital to Siddi existence. Data for this research were gathered using in-person interviews. The primary question answered is twofold: 1) Do Siddis consider themselves Indian or African? In return, 2) do non-Siddis look at Siddis as African or Indian? The interviews suggest strongly that Siddis in Karnataka do not associate with Africa.

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Meanwhile, non-Siddis look at Siddis as Indian if they are familiar with them and non-Indian if they are unfamiliar with them.

KEYWORDS: Siddis, topophilia, race, discrimination, India

There is no *Place Like Home*

Sydney Trionfo

Geography and Environmental Planning

Towson University

It is in our human nature to create a physical and mental connection to the places we frequent. Throughout our lives, we experience countless events that shape us into the adults we will one day become. We develop our own thoughts, feelings, and attitudes about our surroundings whether they be fixated on being the home, our place of work, or where we engage in leisurely activity. We unconsciously put certain locations in a sort of social hierarchy, ranking them based on their importance in our lives. The places we spend the most time tend to be the places we feel the greatest sense of connection to. Our upbringing leaves a lasting impact on the way we form our thoughts, ideas, and perceptions. Over time, we begin to form a “sense of place”; specific locations spark memories, distinct smells remind us of a different time, familiar visuals help us look back on certain moments in our lives. The basic human senses aid in constructing a sense of importance rooted deep within us. When asked “What place is important to you?”, how would one begin to answer?

KEYWORDS: Sense of Place, memory, experience, topophilia

Weather-related Influences on Rural-to-urban Migration: A Spectrum of Attribution in Beira, Mozambique

Kelly Anderson and Julie Silva, Ph.D.

Geographical Sciences

University of Maryland, College Park

This article investigates the pathways linking environmental and economic drivers of rural-to-urban migration in Mozambique. Using examples from two rural-to-urban migrant communities located in the coastal city of Beira, we build on a generalizable migration framework (Black et al. 2011) of interrelating environmental and non-environmental drivers in order to explore how perception and lived experience influence migration decision-making in contexts of environmental stress. We combine content analysis and descriptive statistics of household semi-structured interview and survey data. Using a decision-tree diagram to trace pathways linking experiences of adverse weather to migration, we evaluate the relative strength with which respondents attribute migration to weather-related factors. Qualitative findings reveal that (1) the weather’s influence on migration falls on a spectrum of attribution, (2) while few migrants directly link their migration to weather-related factors, the overwhelming majority link weather to worsening economic conditions in origin areas, and (3) migrants reject the label of climate migrant, and

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maintain that migrating from rural areas is primarily an economic decision. Results indicate that the development of resilient economic livelihoods would enable farmers to stay rather than migrate from rural areas.

Keywords: Migration, environmental stress, perception

The Perfect Storm

Tiffany DeBoer

Geography & Environmental Planning

Towson University

Recent literature over the past decade has noted variability in the frequency of tornadoes throughout different regions of the United States. The Southeast region, in particular, has emerged as a tornado-prone region through the use of various metrics of tornado activity and has been linked to the El Niño/Southern Oscillation via modulations in the jet stream and environmental parameters. While most studies consider this link at the seasonal scale, my study examines the relationship between tornado counts and Niño 3.4 index at the monthly scale. To do this, I assessed the central tendency and variability as well as the spatial distributions of tornado activity per ENSO phase. The rate of change of Niño 3.4 from month-to-month is also examined in this study to determine if tornado activity is linked to the progression of the El Niño/Southern Oscillation. The progression of ENSO does have an impact on tornado activity. Concurrent and lagged correlations examined in this study indicate sub-seasonal variability.

KEYWORDS: Tornadoes, El Niño/Southern Oscillation, Southeast United States

A Study of the 1931 China Floods

Sidney Losey

Geography & Environmental Planning

Towson University

This is an exploration of the flooding that occurred in 1931 of the Yangtze river in China. This flooding event affected 52 million people. The severe weather event was preceded by a phenomenal series of extreme weather, namely high levels of snow, a period of drought, and unusually high cyclonic activity. The flood was extraordinary in terms of both immediate and long-lasting effects. Short term effects include the direct loss of life from the flood and a revival of traditional religion. There were many long-lasting affects such as economic failure, unusable land, and a surge in diseases. This was an unprecedented flooding event that was caused by a combination of severe and extreme weather, and the lasting effects wreaked havoc on the affected areas and communities.

KEYWORDS: Floods, China, human dimensions of the extreme weather

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We Can't Afford to live here: Deconstructing MSAs and cities with low median rental prices.

DeCarlo Brown
Geography & Environmental Planning
Towson University

The use of federal census data at the local level can distort our view of low-income surrounding cities. Although CENSUS documentation cautions the public not use figures for anything other than statistical purposes, states rely on federally produced data for a multitude of uses. A misapplication of CENSUS figures within Maryland has resulted in incomplete view of labor and housing. Maryland uses the federal Adjusted Median Income (AMI) calculation to determine affordability and low income limits for state programs. However, AMI is not designed to be used at the local level due to downward adjustments for high median income and large rental area aggregation attached to metropolitan areas. How does this state level decision impact counties that surround Baltimore, which have weak links to their Metropolitan Statistical Area (MSA)? How might we begin to locate and adjust for these differences at the local level? I believe adjustments should be made to assumptions, urban delineations, median income and rent calculations, and inclusion into MSAs in order to present a more complete picture of life within Maryland.

KEYWORDS: Scalar misalignment, Baltimore, Census, urban geography

Liberal Mutants and Illiberal Institutions: The Gifted and the securitization of immigration

Katrinka Somdahl-Sands
Political Science and New Jersey Geographic Alliance
Rowan University

Liberalism is the foundational political ideology in the US today. Both dominant political parties claim to be acting to promote liberty and freedom. However there is a tension within liberalism itself, between its recognition of individual and group identity and its theoretical claims to universality. This conflict leads to questions of how to balance the protection of individual rights and the protection of the general populace. Our governmental institutions are charged with managing this balance. This paper will outline the theoretical foundations that create this tension within liberalism, explain how these tensions are mediated (or not) in our institutions and then look at how the television show “The Gifted” is using different approaches within liberalism as the foundation for the show and its dramatic story lines. In particular, “The Gifted” explores the risk calculus undertaken by majority and minority populations around keeping your community safe when your own “liberty” is undercut by fear of an “Other.” There are interesting parallels between the liberal and illiberal policies being enacted in real life immigration policy and in the program.

KEYWORDS: Liberalism, fear, the “Other,” representation

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WORKSHOP: AAG Geography Student Recruitment and Career Resources

FACILITATORS

Emily Fekete, American Association of Geographers

Mark Revell, American Association of Geographers

Coline Dony, American Association of Geographers

As AAG President David Kaplan recently outlined, there is a pervasive need among geography departments to actively recruit students into geography programs. Often students do not declare a geography major until after it is “discovered” in their sophomore or junior years of college, leaving little time to advise and hone student abilities. A large factor leading into late major declarations is the lack of prior knowledge of geography from a student’s K-12 education in the U.S. Departments may face challenges in knowing what resources are best to use to encourage students to join their program, and in advising them on career options once students are involved in geography majors. This workshop is meant to address these challenges, thus participants in this workshop will:

- **Familiarize themselves with AAG efforts to bolster K-12 education in the US
- **Learn about the AP Human Geography program and connecting to AP classrooms as a potential pipeline for recruiting students to geography
- **Explore AAG and other materials currently available to assist in student recruitment
- **Gain knowledge of career resources currently available for geography students
- **Discuss in small groups actionable plans to move forward with their own department recruitment strategies
- **Become aware of funding opportunities that can support collaboration with K-12 and geography education research