



## *Descargas otorgadas*

Primer Semestre 2020-2021

**Dr. Eric Lamore**  
**Departamento de Inglés**

*Reading Ottobah Cugoano's Letters and Three Editions of Thoughts and Sentiments on the Evil of Slavery Housed at the British Library in London*

For this work, I have been awarded numerous fellowships as well as Visiting Scholar appointments at the University of Chicago and New York University. No scholar has studied the letters written by the Afro-British activist Ottobah Cugoano to determine the ways in which he revised his book, *Thoughts and Sentiments on the Evil of Slave1y*. Nor have scholars examined three editions of Cugoano's *Thoughts* housed at the British Library, at least one of which is not available on scholarly databases and indicates that his friends pressed him to include an autobiographical sketch in his 1787 edition. As a Visiting Fellow at the Eccles Centre in American Studies (part of the British Library), I will photograph these editions in London in June-July 2020. During the Fall 2020 semester, I will continue to identify differences between the editions, write about what motivated Cugoano to revise *Thoughts*, and determine if a London printer distributed *Thoughts* on two occasions in 1787. I will argue that Cugoano's letters indicate that he first wrote the shorter edition of *Thoughts*, even though this edition was published in 1791, four years after the longer 1787 edition appeared in print. This work on Cugoano is part of my current book project, "Unstable as /W}ater": Early Black Atlantic Literature and Textual Fluidity, in which I study authorial and nonauthorial revision practices in various editions of early black Atlantic literature.

**Dr. Alejandro Vélez**  
**Departamento de Ciencias Matemáticas**

*The Nonstandard Wentzell Heat Equation Over Manifolds with Boundary*

The main goal of this research proposal is to investigate the solvability and global regularity theory for a general class of nonlinear evolution equations with Wentzell boundary conditions and nonstandard growth conditions, over a bounded Lipschitz domain, which can be regarded as a bounded domain whose boundary is a Riemannian manifold. Some cases of more general domains where the boundary may not be a Riemannian manifold are planned to be addressed.

**Dra. Celine Casse**  
**Departamento de Química**

### *Cytotoxicity of Graviola Leaf Extracts in a Model of Head and Neck Cancer*

Head and neck cancer (HNC) is a group of cancers that starts in the mouth, nose, throat, larynx, sinuses, or salivary glands. HNC accounts for approximately 5% of all cancers in the United States. About 90% of HNC start in *Squamous Cell Carcinoma* cells (SCC). Phytochemicals extracts from natural product are excellent candidates for cancer prevention strategies in HNC, as they tend to affect several cancer-specific cellular pathways at a time. *Annona muricata* or Graviola is a tropical tree which parts have been used as natural cure for a variety of ailments in traditional medicine. Graviola extracts (GE) offer therapeutic potential since they have been shown to exert an *in vitro* dose dependant cytotoxicity in various types of cancer cells (lung, breast, prostate, pancreas, liver, blood.). While aqueous extracts of Graviola Leaf (GLE) have been shown to have anti-proliferative effects to SCC cells, their toxicity to non-cancerous cells remains unknown. Furthermore, Graviola cytotoxicity seems to be dependent on the nature/polarity of the extraction solvent. The present study aims at 1) establishing the cytotoxicity of ethyl lactate GLE (*ELGLE*), ethanolic GLE (*EGLE*) and aqueous GLE (*AGLE*) toward SCC cell lines vs. non-cancerous Human Gingival Fibroblasts-1 (HGF-1) and 2) assess the phenolic, flavonoid and acetogenins contents of bioactive GLEs. Our hope to identify a GLE that will show specific toxicity to SCCs which phytochemicals we plan to isolate.

**Dr. Mark Jury**  
**Departamento de Física**

### *Caribbean Climate Variability*

This project is focused on Caribbean climate variability using high-resolution datasets to understand climatological processes and improve forecasts. Specific themes include:

- a) hydrology, vegetation, surface fluxes, and air-sea interactions,
- b) air chemistry and climate change, Saharan dust and Amazon smoke plumes,
- c) coastal erosion/ sand transport, and upper ocean variability,
- d) processes of Caribbean floods and drought,
- e) relationship between hurricane intensity and ozone structure.

Fluctuations of climate in the Caribbean have far-reaching impacts. Using high-resolution satellite and model datasets, a better understanding of the underlying processes will be gained, contributing to the sustainable management of climate sensitive resources in Puerto Rico. The research efforts continue the on-going work by Prof Jury and students at UPRM.

**Dr. Hilton Alers**

**Departamento de Estudios Hispánicos**

*Hacia un modelo computacional de análisis sintáctico y composición semántica*

Este proyecto de investigación en Inteligencia Artificial / Lingüística Computacional / Procesamiento de Lenguas Naturales consiste en desarrollar un sistema de análisis sintáctico (parser) simbólico, determinista, ascendente (bottom up), de izquierda a derecha y de derivación de extrema derecha LR(1) que reconozca las secuencias de unidades léxicas que constituyan oraciones (gramaticalmente aceptables) del español y derive para cada una de estas todas las representaciones sintácticas posibles. El analizador debe poder detectar secuencias con ambigüedad estructural y representar oraciones declarativas e interrogativas, simples y subordinadas, con o sin cláusulas relativas. Para ello el analizador dará cuenta de movimientos sintácticos y categorías vacías presentes en la derivación. A partir de las representaciones sintácticas generadas, el sistema computará el valor semántico de las estructuras usando cálculo lambda para implementar reglas de composición semántica. El analizador sintáctico que se propone para el español será un sistema modular codificado en Prolog que está basado en principios de Gramática Universal de acuerdo con el Programa Minimalista en la Teoría de Principios y Parámetros (P&P) (1995, 2000). Debido al carácter universal de los modelos teóricos basados en principios en lugar de reglas, el mismo sistema puede analizar secuencias en cualquier lengua natural usando fundamentalmente el mismo conjunto de principios, pero con un lexicón diferente y una fijación específica de valores para los parámetros lingüísticos. Con el fin de lograr el objetivo, se desarrollará un vector paramétrico y un lexicón estructurado que le permita al sistema analizar sintácticamente y computar semánticamente una muestra representativa de oraciones del español.

**Dr. Melvin González**

**Departamento de Estudios Hispánicos**

*Cuantificadores y adverbios de grado*

El objetivo fundamental de este trabajo es la investigación y redacción de un artículo sobre cuantificación en las lenguas naturales; para esto, usaremos la teoría de los cuantificadores generalizados para examinar los cuantificadores y sus propiedades asociadas: monotonicidad, entre otras. Un cuantificador generalizado es un conjunto formado por conjuntos que son subconjuntos del dominio de un modelo (García Murga 2002). Una expresión del tipo 'Un A es B', en esta teoría, se analizaría de la siguiente manera: la expresión es verdadera si y solo si la intersección de A y B es igual o mayor a 1; es decir, si por lo menos existe un A que sea B. La investigación toma además en consideración los adverbios y los analiza como cuantificadores: los adverbios como 'siempre' expresan relaciones entre dos conjuntos de eventualidades o situaciones. Así, 'siempre (A)(B)' será verdadero si A es un subconjunto de B; mientras que 'nunca (A)(B)' es verdadero si la intersección de A y B es el conjunto vacío. Por último, el artículo incorpora datos del español puertorriqueño para ejemplificar y extender la discusión elaborada.

**Dra. Maribel Acosta**  
**Departamento de Estudios Hispánicos**

*Desde el archivo: las "Memorias mínimas" de René Marqués*

Por los pasados tres años y medio hemos tenido acceso a la biblioteca personal y los archivos de uno de los escritores puertorriqueños más prolíficos y reconocidos: René Marqués. Gracias al señor José La comba, custodio del patrimonio marquesiano, hemos revisado los manuscritos de sus obras y encontrado una serie de textos inéditos que nos hemos dado a la tarea de examinar, transcribir, estudiar, prologar y publicar a través de la iniciativa Libros del centenario del señor Arnaldo González. Durante este tiempo, nos llamaba la atención que Marqués, un escritor tan meticuloso, que conservó todo cuanto escribía y lo que representara un detalle significativo en su vida, no hubiera llevado un diario o escrito su autobiografía. La posibilidad de que el tiempo lo hubiera traicionado y que fuera un proyecto inconcluso parecía cada día más factible, hasta que descubrimos una libreta con el manuscrito, aún sin refinar, de lo que sería su último libro, que tituló "Memorias mínimas." Además, encontramos unas notas en las que indicaba algunas fotos que completarían el texto. Este invaluable hallazgo necesita ser trabajado y anotado cuidadosamente e igualmente pretendemos escrutar entre sus fotos para que el resultado final sea lo más parecido a lo conceptualizado por Marqués. Esto haría posible que nos reencontremos y conozcamos otra cara del escritor, una más íntima quizás, y con ella al ser humano con sus recuerdos, cavilaciones, convicciones, influencias y amores, junto con el devenir de nuestro pueblo. En fin, 40 años después de su muerte, René Marqués continúa sorprendiéndonos.

**Dra. Ricia Anne Chansky**  
**Departamento de Inglés**

*Mi María: Narratives of Puerto Rico in the Aftermath of the Hurricane, an edited book in the Voice of Witness book series at Haymarket Books*

For the past two academic years, I have been directing a large-scale public humanities project, "Mi María: Puerto Rico after the Hurricane," in collaboration with both the Voice of Witness (VOW) Foundation and the Humanities Action Lab (HAL) "Initiative on Climate and Environmental Justice." This project considers the immediate benefits of multimodal mass-listening as an act of rendering visible the invisible of the disenfranchised communities impacted by disaster and its aftermaths while utilizing oral history and other biographical methodologies—contextualized in critical disaster studies and environmental humanities—to study the impacts climatological catastrophe. While there are many ongoing parts to this project—including exhibitions—what I will be working on in the autumn 2020 semester is the finalization of the book manuscript for the VOW series at Haymarket Books. VOW is a nonprofit dedicated to bringing attention to human rights issues through the amplification of life stories and Haymarket is the leading social justice press in the US. Following the model that Nobel Laureate in Literature, Svetlana Alexievitch, established in her oral history book, Voices from Chernobyl, this volume will be a collection of "polyphonic writings [that are] a monument to suffering and courage in our time." To

accomplish this exacting work, the autumn 2020 semester will be dedicated to the meticulous editing of the oral histories included in the VOW book and the overall preparation of the manuscript for submission, including writing the introduction, compiling and editing the appendices, and working with the illustrators.

**Dr. Jeffrey Herlihy**  
**Departamento de Humanidades**

*Decolonizing American Spanish: Eurocentrism and the Limits of Foreignness in the Academic Ecosystem*

*Decolonizing American Spanish* reconsiders the role of Spanish-language cultures in US, focusing on the university as one of the main levers of political and social power that supports the ongoing misrecognition of Spanish as foreign in the US. A significant part of this long-term book-project explores how the institutional foreignization of Spanish-language cultural material thrusts many communities into political and social crises, which shape the nature of citizenship, including public health, democratic participation, literary and graduation rates. The second intellectual thrust of the book—focused largely on literature and other texts but also art, film, theater, music, among others—suggests a shift toward decolonial epistemes that would localize intellectual focus, institutionally domesticize US Spanish-language cultures and memory-making, and provide a space to develop marginalized knowledges, voices, and agencies.

I argue that the overwhelming eurocentrism at US universities obfuscates local varieties of the language and culture in ways that are detrimental to students and the communities served. My theoretical approach is formulated in ways that question the self-evidence and value of the monolingual/monocultural university as an institution, and query the relevancies of how geographic, trans/national and regional strictures of conventional approaches have been developed and institutionalized: a specific focus of my critique concerns the area-studies/periodization model that explicitly neglects US/Latin American cultures vis-à-vis Spain. Departing to a degree from the presumptions of uniformity across time and space (those tacit myths that often inform area-studies epistemes) I dispute the degree to which traditional centers and their grammars are meaningful containers of identity, emotion, community, and cultural performance. My focus on local cultures and on lived experiences, in embodied and cognitive senses, endeavors to add dimensions to the existent collection of critical categories, and to shift focus onto non-traditional subjectivities, ultimately gesturing toward what may be understood as legitimate intellectual specializations that could be institutionalized as academic disciplines, thus opening the possibilities of intellectual connections and concentrations that do not exist at the present time.

**Dr. Christopher Powers**

**Departamento de Humanidades**

*The Ghosts of the Millions in the Machine On the Spectral Futures of Mourning*

"The Ghosts of the Millions in the Machine" is an exploration of the phenomenon of mourning as it is mediated by technology. It approaches mourning through a combination of psychoanalytical theory and the philosophy of technologies of mechanical and digital reproduction. It addresses the phenomena of mourning on the internet, social media profiles of the deceased, memorial websites, avatars and virtual cenotaphs. It speculates on the role of technology in social mourning with reference to the Puerto Rican context. My forthcoming book 4,645: Chronicle of the Boricua Summer is a memoir and reflection on the significance of mourning for the July, 2019 protests in Puerto Rico. It discusses the importance of the number 4,645, a popularly accepted tally for the deaths caused by Hurricane María, as a symbol that captured a national need for mourning traumatic loss, within the context of a testimonial account of a political movement. My chronicle mobilized, obliquely, psychoanalytical theories of mourning from Freud, Klein, Abraham and Torok and others to discuss mourning in a social context. The present project will expand explicitly on these theoretical aspects of my reflections on what I label the cultural studies of mourning, this time embedding Puerto Rico within a larger contesxt, which has now gained even greater relevance in the midst of a global pandemic. The release time will allow me to complete a draft of the text, present it at the "Tecnologías Actuales y Futuros Alternos," conference to be held next semester and elaborate it into an article for submission for publication.